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NEXUS

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The Jinn, Islam and ETs

Tesla's wireless electricity

Drugs and chemicals
in our water supplies

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• Electrical Cratering • Organic Silica •

NEXUS

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CONTENTS

LETTERS TO THE EDITOR.....4 <i>Comments from readers on NEXUS-related topics.</i>	TESLA'S WIRELESS ELECTRICITY.....51 <i>By Thomas Valone, PhD. The wireless electricity transmission system that Dr Nikola Tesla pioneered could solve many of the ongoing power supply problems in the USA today and into the future.</i>
GLOBAL NEWS.....6 <i>Groundbreaking news, including fraud over a missing link between humans and Neanderthals, a cover-up by DuPont on the dangers of teflon, and a plasma weapon that induces pain from a distance.</i>	SIBERIA'S "VALLEY OF DEATH"—Part 4.....55 <i>By Dr Valery Uvarov. Eyewitness reports of the destruction of meteorites over Siberia in 1984 and 2002 by "terminator spheres" give further credence to accounts of the 1908 Tunguska explosion.</i>
ONWARD TO IRAN & THE "WAR ON TYRANNY"....11 <i>By Richard Heinberg. The US Bush administration is moving closer to a war on Iran, not just over the nuclear weapons issue but Iran's plan to open an oil bourse and trade in euros, not dollars.</i>	THE TWILIGHT ZONE.....60 <i>This 1983 article by Gordon Creighton draws many parallels between ETs and the Jinns, whose subtle influence on man is recognised by Islam, and refers to Rudolf Steiner's warnings about demonic beings.</i>
THE PERSECUTION OF LOIC LE RIBAUT—Part 1....19 <i>By Martin J. Walker. A French forensic scientist who co-developed a form of organic silica that can cure a range of ailments was hounded by the authorities and corporations and forced into exile.</i>	REVIEWS—Books.....65 <i>"The Energy Machine of T. Henry Moray" by Moray B. King "How to Photograph the Paranormal" by Leonore Sweet, PhD "The Carbon Dioxide Syndrome" by Jennifer & Russell Stark "What Really Causes Alzheimer's Disease", by Harold D. Foster "A Mere Grain of Sand" by Ray & Gillian Brown "The Prevention of All Cancers" by Hulder Regehr Clark, PhD "The Elite Don't Dare Let Us Tell The People" by R. G. Ross, Sr "Raw Meaty Bones: Promote Health" by Tom Lonsdale "Divining Earth Spirit" by Alanna Moore "Project Beta: The Story of Paul Bennewitz..." by Greg Bishop "The Lost Colony of the Templars" by Steven Sora "The Magdalene Legacy" by Laurence Gardner "Absurdistan: A Bumpy Ride..." by Eric Campbell "The Sydney Connection" by John Jiggins</i>
ORGAN TRANSPLANTS & CELLULAR MEMORIES.....27 <i>By Paul Pearsall, PhD, Gary E. Schwartz, PhD, and Linda G. Russek, PhD. Many organ transplant recipients exhibit behaviours and preferences that could only have come from the organ donors.</i>	REVIEWS—DVDs & Videos.....72 <i>"The Illuminati - Volume 1" by C. Everard-Jurquet & A. J. Hilder "Rife's Fall" by Shawn Montgomery</i>
DRUGS AND CHEMICALS ON TAP.....35 <i>By Sherrill Sellman, ND. Studies show that the increasing number of poisons being detected in our waterways and water supplies are sourced from pharmaceutical drugs and personal care products.</i>	REVIEWS—Music.....73 <i>"Music from the Chocolate Lands" by various artists "Chartres" by Catherine Braslavsky Ensemble "Spirit of Love" by Maya & Sage "Red & Green" by Ali Farka Toure "Enchanted Egypt" by Phil Thornton & Hossam Ramzy</i>
SHORT HISTORY OF THE ROUND TABLE—Part 3....39 <i>By Will Banyan. In 1909, members of Milner's Kindergarten regrouped in London, founding the Round Table for the purpose of creating an imperial federation covering Britain and the dominions.</i>	NEXUS BOOKS, VIDEOS, ADS, SUBS.....80-88
SCIENCE NEWS.....46 <i>This issue we present the results of an experiment by the Thunderbolts group using electrical discharge to create craters in the lab, and a treatise by Karen Klockner and David Brennan on parallel universes, paranormal physics and dimensional doorways.</i>	

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STATEMENT OF PURPOSE

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Editorial

Greetings, and welcome to another great line-up of articles in this issue of NEXUS. First we have an article exploring the hidden reasons as to why the USA might want to attack Iran. Already, there are predictions that the attack is planned for June this year, so look for either a trigger event or a slow gradual assault on our logic to convince us that Iran is a "baddie".

Speaking of which, it is kind of a shock to realise that we in Australia are likely to be on the side of the "baddies" in any future war, assuming we remain a pseudo-state of the UK-USA axis of deception. I mean, what else can you call an alliance of nations dominated by a hidden cabal that owns and manipulates the media and deliberately creates terrorism and terrorists to justify attacking sovereign nations?

I notice more and more writers are commenting that the US empire is crumbling. Growing unemployment, the removal of civil rights and liberties, a huge prison population, a currency that is rapidly losing value, a government despised overseas, a population that largely seems to care only about what is on their propaganda-filled TVs, and a foreign policy run by the hidden faces of the military-industrial complex. Respect for America has turned to hatred and fear of America. We watched, hoping that the last presidential election may reflect what many concerned Americans feel—only to find that corruption is so entrenched that fair elections are now nonexistent in the USA.

The military-industrial-intelligence-financial-media complex that runs America owes no loyalty to national or religious boundaries. It is housed as much in Europe and the UK as it is in the USA. Right now, it serves their interests to turn America into a fascist theocracy and aim it squarely at the unbelievers—who just happen to be the inhabitants of countries with desirable resources.

And while the so-called civilised world looks on with shock and dismay at the moronic sock-puppet leaders of the USA and the UK, Russia, India and China are forming very cosy relationships and alliances with each other and also with resource-rich countries in South America and Africa.

Meanwhile, back in the trenches, we have an article by Martin Walker on the case of a French forensic scientist Loïc Le Ribault, who became very famous for his work but then made the mistake of co-discovering and developing a medical application for his material, known as organic silica. First came bribes to bury it, next came "suggestions" to bury it, then came the raids and imprisonment. Sound familiar? Well this happened in France, and it shows that fame, profile and years of service matter not when someone higher up wants you silenced.

Next we have another article that should make you all think. It is about how some people who have had organ transplants suddenly find themselves with memories, feelings and habits that could only have originated from the donor of the organ. This is absolutely fascinating, and the cases mentioned are but a few of the many on record.

Still on the health front, Sherrill Sellman has written an article about the continuing discovery of dangerous drugs and chemicals in our water supplies, and we are not just talking drinking water but the water table itself. Caffeine, nicotine and all sorts of pharmaceutical drugs, not to mention agricultural chemicals, are popping up in that innocent-looking spring water you may have on your property.

Another article of great interest is on "parallel universes", a concept being accepted more and more by mainstream science. The authors assert that this concept is a logical model to be used to explain mysterious phenomena such as sudden disappearances of people or sudden appearances of things.

The final article you simply must read is in *Twilight Zone*. It is reprinted from a 1983 issue of the UK-based journal *Flying Saucer Review* (now in its 50th year!) and is all about the mystery beings that in Islam are referred to as the "Jinn". These beings like to hover in a dimensional frequency just outside our own, but close enough for them to influence and "feed off" our emotions and desires.

Finally, I would like to thank the many, many people who are so moved by reading NEXUS that they send us a little email or note to express their feelings. I'm sorry I cannot reply to them all, but I can assure you I read them all. Thank you!

Duncan

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Letters to the Editor ...

Alternative Cancer Treatments

Dear Editor: Since your magazine is responsible for my involvement with alternative cancer treatments, I was hoping that you would be interested in exchanging links.

In 1997 a friend sent me a NEXUS magazine that contained an article about Cancell, the alternative cancer treatment [see 2/17]. I read that article and was amazed that such a thing existed. Okay, naive. I was also outraged. I purchased and read the Cancell book. I also obtained the NCI test results myself to verify that the cover-up was actually happening. When I was convinced of the cover-up, I searched the web for an exposé about it. There wasn't one, so I started a website, the Cancell home page. Then the email questions started. Most answers took a bit of research. Whenever I answered a new question, I put the new information into my web page.

After a few years and hundreds of emails answered, I realised that people seeking alternative cancer treatments needed more options. In 2004 I opened a new website, the Alternative Cancer Treatments Comparison. It contains a table that allows people to compare treatments side by side (see <http://alternativecancer.us/index.htm#Table>).

Most alternative cancer treatments are about 30 per cent effective. That means that most people who try such a treatment will not be helped. However, there are many treatments. One of those treatments will most likely work for an individual, but finding the "best" treatment does nothing to help a person find the treatment that will work for them. As explained on this page, what people call the "best" treatment is actually the right treatment for a large group, but it is most likely the wrong treatment selection method for an individual... See what you started? You should be proud. Of course, I am.

Paul Winter, paul@handpen.com

Forced Medication for ADD

Dear Editor: I have a son who is now twenty-eight. When he was in elementary school, he was diagnosed with ADD. I was *forced* by the school district to *drug* my child or he could not attend school. If he didn't attend school, I would be arrested. Talk about a rock and a hard place!

Now that he is older I can see that the main problem was that he was bored to death. In third grade, his SAT scores for reading and math were at college levels. The school district in our area had a program for "academically talented" kids, so we enrolled him in that. He was so bored with that, that he quit going to it after a couple of months.

He ended up dropping out of school and now is a self-taught computer wiz, and he also taught himself to play the guitar and drums at age fifteen.

It's pretty bad when your child can teach himself better than the schools can!

Linda Kline, Reno, Nevada, USA

ADHD and Dietary Phosphate

Dear Duncan: After reading the article by Dr Bob Jacobs, "ADD & ADHD: Epidemic of a Phantom Disease" (NEXUS 12/02), it seemed important to me that your readers were made aware of the work in this area done by the German scientist Hertha Hafer (*The Hidden Drug, Dietary Phosphate*; see NEXUS book review, vol. 9, no. 5).

Hafer, on hearing ADD referred to as "the hot-dog syndrome", designed a clinical test in which she administered a mineral phosphorus salt to her ADD child. The child then became uncontrollable.

The theory is that when excess phosphorus lowers the blood pH from 7.4 to 7.38, a hormone is released to raise the blood pH by taking calcium from bones. This mixture of hormones and calcium blocks the receptors in the frontal lobes of the brain and the child is then left without self-control.

Hafer found that a low-phosphorus diet could prevent this occurring. This diet involves: no cow's milk or cheese, as it has six times the phosphorus of human milk; no soft processed meats (mineral salts, phosphorus); no cola (phosphoric acid); and no self-raising flour or modern baking powder, as it contains phosphoric acid rather than the tartaric acid of previous years.

Prevention may be better than cure, but unfortunately this is not a profitable research area.

The English edition is available from the translator Jane Donlin (<http://www.phosadd.com>).

Best regards,

David Hardy, Goodwood, South Australia

Princes of Plunder Links

I don't normally write letters (even when I ought) and I mention this so that you might grasp the degree of my pleasure and gratitude for your publishing of David G. Guyatt's extraordinary article "Princes of Plunder" (NEXUS 12/02).

As an amateur student of the history of Nazi Germany and the origins of Nazism in occult orders and secret societies from before World War I, and as a collector of NEXUS since the middle of volume two, I have become familiar with almost all the figures named in that article.

However, the shock (and perverse delight) of encountering David's "Blitzkrieg" of names and connections was awesome! I'd quite recently become familiar with the history of the Warburg family via recent "post Iraq-gate" web research, but to have all the links to the Skull & Bones/OSS-CIA/IG Farben/Thyssen/Lenin/Hitler/Schacht/the US Federal Reserve/Gestapo/Bohle/Schellenberg/Hess/British Metal Corp./Rhodes/SOE/Illuminati and back again to S&B was like having all one's *Weinachtsabends* at once. And that was just from the introduction!

Then going on to an analysis of

the involvement of major players and events from World War II was like having the best of all "True War Stories" up on the big screen at once! Outrageously excellent work; a super-highlight of such articles for years.

I take this opportunity also to thank and congratulate NEXUS on being the premier "new times, old secrets" type magazine of the world of truth publishing and for the superb range of subjects that you cover. Originally my interest was in ufology and hidden history, but within months of having re-encountered NEXUS I was quickly hooked on everything and anything covered in all your issues from then on.

I am particularly supportive of your coverage of government drug-running and political corruption-type articles, and am not one of those who thinks that because it's always about America it doesn't really concern/involve us or actually relate to the Australian situation.

Whether it be our betrayal of Timor for oil or being used as the diplomatic link by which the US got officially invited into Vietnam, and our lesson-unlearned lackeyism again in Iraq, Australia's position as the Supreme Controlled Market Zone of the Western Economic Empire is intimately linked with the very conspiratorial forces delineated in "Princes of Plunder".

Bless you "Nexies" for your continuing and vital contribution to the "War on Error".

Love-Light-Life,
Robert, Perth, Western Australia

Cod Liver Oil vs Arthritis

Dear Duncan: I recently discovered some interesting information that will help many people suffering from arthritis and similar joint pain.

My father has been suffering for some years and gave up on the overpriced and seemingly ineffective glucosamine a long time ago.

Recently, while talking to a

... more Letters to the Editor

NB: Please keep letters to approx. 150 to 250 words in length. Ed.

colleague at work, he mentioned that he'd been taking cod liver oil but it was not having any effect. She asked him when he took it and he told her that he usually took it after he got home from work when he remembered to do so.

She told him that her mother takes cod liver oil for arthritis to great effect; more importantly, she takes it first thing in the morning with a citrus drink which helps distribute it around the body.

He tried this idea of taking the cod liver oil first thing in the morning with a glass of orange juice and within two days could feel the benefit, with his joints feeling more supple and less painful.

Hope this helps anyone reading this. I thought that it would be important to pass on the information to help as many people as possible.

Regards,
Aled Long

Surviving the Next Depression

Dear Duncan: I read with great interest the recent article, "The Endangered US Dollar" (12/01). It is obvious from this and many other indicators that some sort of economic collapse must eventually overtake us. Much speculation has centred around such a day of economic reckoning, and many have speculated that it would be worse than the Great Depression of the 1930s. I am inclined to agree.

Several safety valves were in place in the US during the 1930s which mitigated the effects of the Great Depression. One factor was the greater number of small farms in the US at that time. Many people who worked in places in the industrial Midwest, such as Detroit, had moved there directly from farms in the south; they as well as many other urbanites had relatives who still lived on working farms.

While many people did lose their farms to repossession during the Depression, many were

solvent enough and prudent enough to hold onto them. As a consequence, when many people in urban areas lost their jobs, they were able to move in with their rural relatives. Those who had grown up on farms had a working knowledge of farming and could more or less take up where they left off.

In any case, a family farm at that time could absorb more people without too much disruption because more people meant more production; the family could at least feed itself. Others could find work as tenant farmers and farm labourers because agriculture was not as mechanised or as centralised at that time.

Many people managed to ride out the trough of the Great Depression in 1932-33 this way and survive.

Today the situation is quite different. There are many fewer family farms in the United States, and the large farms that dominate agriculture are capital and energy intensive. If the economy collapses, it will take many large farms and agribusiness corporations with it.

Obviously this would disrupt food production and distribution. In addition, fewer small farms means fewer opportunities for unemployed urban residents to take refuge.

Also, the present generation of city dwellers is many years removed from any direct experience with agriculture. It would be difficult to re-establish a large number of small farms quickly if the large corporate farms failed and/or if energy shortages dictated a return to lower-tech agriculture.

Making even a primitive farm work requires a great deal of specialised knowledge that cannot be acquired quickly. In addition, the level of physical exertion demanded by this type of farming is beyond the experience of most young people in the US today, a country in which obesity among children and teenagers is becoming a major problem.

Centralising agriculture and

making it produce more "efficiently" by the application of large inputs of capital, fossil fuels in the form of chemical fertilisers and behemoth farm machines and thus taking away the need for many farmers has turned off one of the major safety valves of the last great economic upheaval.

Modern agriculture has traded short-term gain for long-term collapse, and unfortunately the "long run" is fast approaching!

Harold Satterfield, Tucson, Arizona, USA

Nicotine Prevents Cholera!

Hi, NEXUS people: I am writing this because recently I emailed South Asian media just after the tsunami because I'd heard on the news about cholera breaking out and I thought to let them know of a simple cure for it that was used throughout Europe from end of the 15th century: nicotine. People who smoked were not falling sick, so even children were given tobacco to smoke.

It was interesting to see all the WHO, Red Cross and other humanitarians who go for big money-collecting campaigns, bring toothpaste to the affected—when, in fact, help can be sometimes just a small bit of practical information.

Maybe you could do an article researching nicotine and cholera?

Best regards, and keep up the good work,

Kristina, a reader of your Croatian translation of NEXUS

The Social Credit Solution

Vladimir Nuri's article in NEXUS ("Fractional Reserve Banking as Economic Parasitism", 11/03) was an excellent example of the new wave of awareness coming to a field that the Social Credit and other monetary reform movements have been contesting for 80 years or more.

Social Credit was founded by C. H. Douglas, an engineer of international renown appointed by the British government during

World War I to improve the performance of the aircraft industry. In this industry and others he checked later, he found that none paid out as wages, salaries and dividends sufficient "purchasing power" for people to be able to buy their products.

He propounded what now would be classed as a scientific model but, this being before his time, he called it a "theorem".

It states that in industry in general, "A" worth of incomes could not fully purchase goods whose prices included both "A" costs and other "B" costs such as depreciation allowances, etc. "A" is not equal to "A+B".

In the existing system the "gap" between the two would only be "filled" by borrowing money for construction of capital goods for industrial expansion and production of non-consumables such as armaments or by exporting more than the nation imported.

He also showed by simple mathematics that banks create money which they lend into circulation as interest-bearing debt, so that the debt structure of the nation must continually increase. He suggested that such an imbalanced system must break down from time to time.

He proposed various measures to give people the means to enjoy the benefits of their own production. Details of these are available elsewhere.

His ideas gained wide interest for a time, but they also raised a storm of counterattack and ridicule from his opponents.

I suggest that when the Douglas model does gain widespread acceptance, it will rank with some of the great unifying theories of science. That will not happen until the corrupt and largely "bought" discipline of macroeconomics abandons its unscientific and almost superstitious approach and adopts scientific methods.

John G. Rawson, BSc, DipFor, Member of the NZ Institute of Forestry and Life Member of the NZ Democratic Party Inc. (Social Credit), New Zealand

ANTHROPOLOGIST DISGRACED OVER NEANDERTHAL FRAUD

It appeared to be one of archaeology's most sensational finds. The skull fragment discovered in a peat bog near Hamburg was more than 36,000 years old—and was the vital missing link between modern humans and Neanderthals.

This, at least, is what Professor Reiner Protsch von Zieten—a distinguished, cigar-smoking German anthropologist—told his scientific colleagues, to global acclaim, after being invited to date the extremely rare skull.

However, the professor's 30-year-old academic career has now ended in disgrace after the revelation that he systematically falsified the dates on this and numerous other "Stone Age" relics.

Yesterday [February 18], his university in Frankfurt announced he had been forced to retire because of numerous "falsehoods and manipulations". According to experts, the professor's deceptions may mean an entire tranche of the history of man's development will have to be rewritten.

"Anthropology is going to have to completely revise its picture of modern man between 40,000 and 10,000 years ago," said Thomas Terberger, the archaeologist who discovered the hoax. "Prof. Protsch's work appeared to prove that anatomically modern humans and Neanderthals had co-existed, and perhaps had even had children together. This now appears to be rubbish."



The scandal only came to light when Professor Protsch was caught trying to sell his department's entire chimpanzee skull collection to the United States.

An inquiry later established that he had also passed off fake fossils as real ones and had plagiarised other scientists' work.

His discovery appeared to show that Neanderthals had spread much further north than was previously known.

During their investigation, the university discovered that the flamboyant Professor Protsch, 65, was unable to work his own carbon-dating machine.

(Source: by Luke Harding, The Guardian, February 19, 2005, <http://www.guardian.co.uk/germany/article/0,2763,1418083,00.html>)

US SCIENTISTS TOLD TO ALTER FINDINGS

More than 200 scientists employed by the US Fish and Wildlife Service say they have been directed to alter official findings to lessen protections for plants and animals, according to a new survey.

The survey of the agency's scientific staff of 1,400 had a 30% response rate and was conducted jointly by the Union of Concerned Scientists and Public Employees for Environmental Responsibility.

A division of the Department of the Interior, the Fish and Wildlife Service is charged with determining which animals and plants should be placed on the endangered species list and with designating areas where such species

need to be protected.

More than half of the biologists and other researchers who responded to the survey said they knew of cases in which commercial interests, including timber, grazing, development and energy companies, had applied political pressure to reverse scientific conclusions deemed harmful to their business.

(Source: by Julie Cart, The Los Angeles Times, February 10, 2005)

11,000 US SOLDIERS NOW DEAD FROM DU POISONING

Considering the tons of depleted uranium used by the US, the Iraq war can truly be called a nuclear war.

Preventive Psychiatry E-Newsletter (no. 169) alleges that the reason Veterans Affairs (VA) Secretary Anthony Principi stepped down earlier in February was the growing scandal surrounding the use of uranium munitions in the Iraq war.

Writing in the newsletter, Arthur N. Bernklau, executive director of Veterans for Constitutional Law, based in New York, stated: "The real reason for Mr Principi's departure was really never given; however, a special report published by eminent scientist Leuren Moret, naming depleted uranium as the definitive cause of the 'Gulf War Syndrome', has fed a growing scandal about the continued use of uranium munitions by the US Military."

Bernklau continued: "This malady [from uranium munitions], that thousands of our military have suffered and died from, has finally been identified as the



"Good morning! This is your laptop random security software. Please get up without any sudden movement, go over to the far wall, fold your arms above your head and spread your legs."

... GLOBAL NEWS ...

cause of this sickness, eliminating the guessing. The terrible truth is now being revealed."

He added: "Out of the 580,400 soldiers who served in GW1 [the first Gulf War], of them, 11,000 are now dead! By the year 2000, there were 325,000 on Permanent Medical Disability. This astounding number of 'Disabled Vets' means that, a decade later, 56% of those soldiers who served have some form of permanent medical problems!"

The disability rate for the wars of the last century was five per cent, although it was higher, at 10 per cent, in Vietnam.

"The VA Secretary [Principi] was aware of this fact as far back as 2000," wrote Bernklau. "He and the Bush administration have been hiding these facts, but now, thanks to Moret's report, [it] ...is far too big to hide or to cover up!"

"Terry Jamison, Public Affairs Specialist, Office of the Deputy Assistant Secretary for Public Affairs, Department of Veterans Affairs at the VA Central Office, recently reported that 'Gulf Era Veterans' now on medical disability, since 1991, number 518,739 veterans," said Bernklau.

"The long-term effects have revealed that DU [uranium oxide] is a virtual death sentence," stated Bernklau. "Marion Fulk, a nuclear physical chemist, who retired from the Lawrence Livermore nuclear weapons lab and was also involved with the Manhattan Project, interprets the new and rapid malignancies in the soldiers [from the 2003 Iraq war] as 'spectacular—and a matter of concern!'"

When asked if the main purpose of using DU was for "destroying things and killing people", Fulk was more specific. "I would say it is the perfect weapon for killing lots of people!"

Principi could not be reached for comment prior to deadline.

(Source: by Bob Nichols, San Francisco Bay View, Feb. 23, 2005, <http://www.sfbayview.com/012605/headscroll012605.shtml>)

SCIENTISTS SERIOUS ABOUT "ELECTRICITY SICKNESS" CLAIMS

For the first time, scientists and health advisers are taking seriously the claims of people who say electricity makes them ill. The UK National Radiological Protection Board (NRPB) is carrying out a review of existing scientific studies into "electromagnetic hypersensitivity" (EHS).

Two studies into the condition, funded

with £750,000 from the Department of Health and the telecommunications industry, are already underway.

Sir William Stewart, the government's adviser on radiation, has called for more research into the issue.

Some researchers believe a proportion of the population suffers ill health—with symptoms including fatigue, severe headaches and skin problems—because of exposure to electromagnetic fields. Other scientists say there is no evidence.

The Swedish government, which recognised EHS as a physical impairment in 2000, calculates that 200,000 people—3.1 per cent of its population—suffer from the condition.

A recent warning by Sir William, head of the NRPB and the Health Protection Agency, that parents should limit their children's use of mobile phones, received widespread publicity. However, his suggestion that another section of the population, as well as the young, could have extra sensitivity to exposure to either radiofrequency fields from mobile phones or electromagnetic fields in general did not.

Dr David Dowson, a former GP who is now a complementary medicine specialist based in Bath, said he had seen around 10 patients he believed to be suffering from EHS. "I think the condition is increasing in prevalence because we are living in a more electrically polluted environment," he noted.

(Source: by Nic Fleming, The Telegraph, UK, January 24, 2005, <http://www.telegraph.co.uk/>)

EUROPEAN LIBEL LAW REVIEW OVER McDONALD'S RULING

The UK government is to review the libel laws after two penniless environmental campaigners who were sued by McDonald's, the global burger chain, recently won a ruling at the European Court of Human Rights that their rights to a fair trial and freedom of expression were violated when they were denied legal aid.

The libel battle pitted Helen Steel, a part-time barmaid earning £65 a week, and David Morris, a single parent on income support, against an expert legal team headed by a £2,000-a-day libel QC in a 313-day trial, the longest in English legal history.

Their victory in Strasbourg, hailed by their QC, Keir Starmer, as a "turning point" in the law of libel, will force the government to take steps to redress the balance between rich and poor in defamation cases.

Mr Starmer said: "Until now, only the rich and famous have been able to defend themselves against libel writs. Now ordinary people can participate much more effectively in public debate without the fear that they will be bankrupted for doing so. This case is a milestone for free speech."

The Strasbourg court awarded damages of £13,750 to Ms Steel and £10,300 to Mr Morris. Apart from paying the damages, the government will have to open the legal-aid purse strings to impecunious defendants sued by multinational corporations or wealthy individuals in complex



"I think you'll find being on our Senate sub-committee rather poetic. Our sole task is to form fresh, new, Senate sub-committees."

... GLOBAL NEWS ...

cases. At present, defamation is excluded from the scope of legal aid.

The unanimous ruling from Strasbourg will also prompt a re-examination of the libel laws, which many believe are too technical and complex and too heavily weighted in favour of claimants.

A spokeswoman for the Department for Constitutional Affairs said the government would be looking at the libel laws generally "in the context of this judgment".

The world's biggest fast-food chain spent an estimated £10 million on the case, which involved 28 pre-trial applications; the pair had to represent themselves with sporadic free help from friendly lawyers and £40,000 raised from supporters to help cover expenses such as transcripts and photocopying.

McDonald's sued Ms Steel and Mr Morris, both from north London, in 1990 over leaflets headed "What's Wrong With McDonald's?", which they distributed outside the burger chain's restaurants.

These accused the chain of exploiting children, being cruel to animals, destroying the rainforest, paying low wages and peddling unhealthy food.

Roger Smith, director of the law reform group Justice, said: "This is a wonderful victory for the sheer perseverance of two litigants who have just stuck to the task and insisted upon justice. It's also a recognition of legal aid as a basic human right which should be available in all types of cases where it is absolutely necessary."

(Source: by Clare Dyer, The Guardian, UK, February 16, 2005)

BRIGHTEST GALACTIC FLASH EVER DETECTED HITS EARTH

A huge explosion halfway across the galaxy packed so much power it affected Earth's ionosphere in December, scientists have announced. The blast originated about 50,000 light-years away and was detected on December 27 last year.

The commotion was caused by a special variety of neutron star known as a *magnetar*. The blast was 100 times more powerful than any other similar eruption witnessed, said David Palmer of Los Alamos National Laboratory.

Several researchers wonder if the magnetar blast could be related to the December 26 earthquake and tsunami.

"Had this happened within 10 light-years of us, it would have severely damaged our atmosphere and possibly have triggered a mass extinction," said Bryan Gaensler of the Harvard-Smithsonian Center for Astrophysics.

"This is a once-in-a-lifetime event," said Rob Fender of Southampton University in the UK. "We have observed an object only 20 kilometres [12 miles] across, on the other side of our galaxy, releasing more energy in a tenth of a second than the Sun emits in 100,000 years."

The eruption was also recorded by the National Science Foundation's Very Large Array of radiotelescopes as well as European satellites and telescopes in Australia.

(Source: Space.com, February 21, 2005, http://www.space.com/scienceastronomy/bright_flash_050218.html)

NEW ANTENNAS FOR HAARP

Phazar Corporation has announced that Antenna Products Corporation (APC) in Mineral Wells, Texas, a wholly owned subsidiary, was recently awarded a US\$3,723,531 firm fixed-price subcontract from BAE Systems ATI for the production of 270 Low Band Antenna Matching Unit Assemblies and 346 High Band Antenna Matching Unit Assemblies. This equipment will be manufactured at APC's plant in Mineral Wells, Texas, and deliveries are scheduled to begin in June 2005 and continue monthly through September 2005.

The equipment will be shipped to the High Frequency Active Auroral Research Program (HAARP) ionospheric research site near Gokona, Alaska—the site of the recently completed installation of an array of 132 crossed-dipole antennas built and installed by APC in 2004.

(Source: News release, February 7, 2005, <http://www.antennaproducts.com/News.htm>)

EPA ACCUSES DUPONT OF HIDING TEFLON'S HEALTH RISKS

More than 50 years after DuPont started producing Teflon, US federal officials are accusing the company of hiding information suggesting that a chemical used to make the popular stick- and stain-resistant coating might cause cancer, birth defects and other ailments.

Environmental regulators are particularly alarmed because scientists are finding perfluoro-octanoic acid, or PFOA, in the blood of people worldwide, and it takes years for the chemical to leave the body. The US Environmental Protection Agency (EPA) reported in early January that exposure even to low levels of PFOA could be harmful.

With virtually no government oversight, PFOA has been used since the early 1950s in the manufacture of non-stick cookware, rain-repellent clothing and hundreds of other products. The EPA is asking an outside panel of experts to assess the risks.

"The fact that a chemical with those non-stick properties nonetheless accumulates in people was not expected," said Charles Auer, director of the EPA's Office of Pollution Prevention and Toxics.

Critics say the lack of knowledge about PFOA and related chemicals—called perfluorinated compounds—exposes a system where environmental regulators largely rely on companies that profit from industrial chemicals to sound alarms about their safety. Questions about potential



"Where's Osama?"

effects on human health and the environment often aren't raised until years after a chemical has been introduced to the marketplace.

Documents have been found detailing how DuPont scientists started warning company executives to avoid human contact with PFOA as early as 1961. Industry tests later determined that the chemical accumulates in the body, doesn't break down in the environment and causes ailments in animals, including cancer, liver damage and birth defects.

(Source: by Michael Hawthorne, Chicago Tribune, January 18, 2005)

US DEVELOPING WEAPON TO INDUCE PAIN FROM A DISTANCE

The US military is developing a weapon that delivers extreme pain from a distance, for use against protesters and rioters.

Documents released under the US Freedom of Information Act show that scientists have received funding to investigate how much pain can be induced in individuals hit by laser-created electromagnetic pulses without killing them.

Due to be ready for use in 2007, the Pulsed Energy Projectile weapon is designed to trigger extreme pain from a distance of one-and-a-quarter miles. It fires a laser pulse that generates a burst of expanding plasma—electrically charged gas—when it hits something solid.

Tests on animals showed it produced "pain and temporary paralysis".

(Source: by Nic Fleming, The Telegraph, March 3, 2005, <http://www.telegraph.co.uk>)

ARCTIC OZONE WIPED OUT BY SOLAR STORMS

Gigantic solar storms destroyed nearly 60 per cent of the ozone above the Arctic during the spring of 2004. Data collected from seven satellites showed that a record barrage of charged particles from the Sun in October and November 2003 destroyed large amounts of ozone.

It started when Earth's magnetic field funnelled some of the electrons from the solar storm into the upper atmosphere over the poles. The electrons ionised nitrogen molecules in that region, and the ions then combined with oxygen to form nitrogen oxides—levels of which rose dramatically towards the end of 2003. These molecules were sucked down into the stratosphere by polar vortex winds, where each one ripped apart hundreds of ozone molecules.

(Source: New Scientist, 12 March 2005)

THINK RITALIN IS SAFE? READ WHAT NOVARTIS SAYS ABOUT ITS OWN PRODUCT!

by Joel Bainerman

If your child's doctor or a child psychiatrist diagnoses your child as suffering from ADD/ADHD and recommends that you give your child Ritalin each morning before school in order to counter the negative effects of ADD/ADHD, then you should be aware of all the facts surrounding Ritalin.

Instead of taking the advice of your doctor or anyone else as to whether Ritalin is safe, simply read the packaging label that Novartis puts inside each box of Ritalin. I did, and this is what it says:

Ritalin is a mild central nervous system stimulant. The mode of action in man is not completely understood, but Ritalin presumably activates the brain stem arousal system and cortex to produce its stimulant effect. There is neither specific evidence which clearly establishes the mechanism whereby Ritalin produces its mental and behavioral effects in children, nor conclusive evidence regarding how these effects relate to the condition of the central nervous system.

Sufficient data on safety and efficacy of long-term use of Ritalin in children are not yet available. Although a causal relationship has not been established, suppression of growth (i.e., weight gain, and/or height) has been reported with the long-term use of stimulants in children.

Clinical experience suggests that in psychotic children, administration of Ritalin may exacerbate symptoms of behavior disturbance and thought disorder. Safe concomitant use of anticonvulsants and Ritalin has not been established.

Use cautiously in patients with hypertension. Blood pressure should be monitored at appropriate intervals in all patients taking Ritalin, especially those with hypertension.

Human pharmacologic studies have shown that Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic drugs (imipramine, clomipramine, desipramine). The safety of using methylphenidate in combination with clonidine or other centrally acting alpha-2 agonists has not been systemically evaluated.

The instructions for use on the package then state:

Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.

Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances. Patients with an element of agitation may react adversely. Prescription should not depend solely on the presence of one or more of the behavioral characteristics. When these symptoms are associated with acute stress reactions, treatment with Ritalin is usually not indicated. Long-term effects of Ritalin in children have not been well established.

Here is what Novartis admits are the known side-effects that can occur from the first day the drug is consumed:

Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, erythema multiforme with histopathological findings of necrotizing vasculitis, and thrombocytopenic purpura); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmia; abdominal pain; weight loss during prolonged therapy. Toxic psychosis has been reported. Although a definite causal relationship has not been established, the following have been reported in patients taking this drug: instances of abnormal liver function, ranging from transaminase elevation to hepatic coma; isolated cases of cerebral arteritis and/or occlusion; leukopenia and/or anemia; transient depressed mood; a few instances of scalp hair loss. In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently; however, any of the other adverse reactions listed above may also occur.

(Source: Joel Bainerman, February 18, 2005, isratech@netvision.net.il. Joel is a parent who recently took his child off Ritalin after learning of the potential dangers of the drug.)

ONWARD TO IRAN AND THE "WAR ON TYRANNY"

The US Bush administration is moving closer to confrontation with Iran over not just the nuclear weapons issue but also over Iran's plans to open an oil bourse and keep control of its own oil reserves.

by **Richard Heinberg**
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In the weeks after 9/11/2001, US President George W. Bush announced the existence of an "Axis of Evil" comprised of the nations of Iraq, Iran and North Korea. In speeches that followed, he implied that he regarded it desirable to achieve "regime change" in all three countries. In the years since, the first of the three, Iraq, has been invaded and reduced to a desolate landscape of violence and hopelessness.

In speeches since the November 2004 elections, Bush and his new Secretary of State Condoleezza Rice have spoken of a "War on Tyranny", which is presumably intended to replace the now-shopworn "War on Terror". The semantic shift reveals much about Washington's plans for the next four years. The new campaign will imply no need to justify pre-emptive attacks based on other nations' possession of banned weapons. Washington can simply target regimes it dislikes, even democratic ones, on the basis of their reputed "tyrannical" nature. Evidently the manipulation of elections has become such an exact science (not only within the US, but elsewhere as well) that "freedom" and "democracy" can be exported wholesale in slogan form with considerable propaganda effect, but with no danger whatever to the interests of those who call the shots.

Potential targets for the War on Tyranny, compiled from the statements of various government officials, include Iran, Syria, Sudan, Algeria, Yemen, Malaysia, Somalia, Indonesia and Georgia—countries strategically critical to the Bush administration's goal of controlling global energy resource extraction and transportation routes. But in every leaked or published list, Iran is the first nation mentioned.

There are good reasons to assume that a US campaign against Iran will commence within months, and that this will serve to open the next and much expanded phase of what is actually the "Global Oil War" of the 21st century. Because of Tehran's connections with other countries troublesome to the United States—including China, Russia and Venezuela—the campaign in Iran will be the key to a planned clean sweep of nations impeding America's "full-spectrum dominance". What follows is partly speculation; however, there is now enough information available upon which to base plausible conjectures as to intentions, likely actions and consequences.

IRAN: BRIEF HISTORY AND BACKGROUND

But first, let us consider the geographic and historical context of the impending events.

The country now known as Iran (ancient Persia) was a centre for pre-Islamic Indo-European culture from the second millennium BCE, and for Islamic culture from the fifth century CE. It was the birthplace of Zoroastrianism, the home of Sufi poet Rumi, a site of empires and a frequent object of conquest.

In the early 19th century, Persia began to fall under the rival commercial and imperial attentions of Britain and Russia, serving as a pivot for the Great Game of Eurasian geopolitics.

In 1901, an Australian explorer named William Knox D'Arcy managed to persuade the Persian shah to grant him mineral rights to the country for 60 years in exchange for £20,000 and a 16 per cent share of the proceeds. D'Arcy then began prospecting for oil, which he found in 1908. Iranian history from then on has hinged on this discovery. Britain meanwhile had realised the strategic importance of petroleum for the future of industrial production and warfare (the British war fleet was converting from coal to oil) and was seeking secure supplies of the resource in the Middle East. Sidney Reilly, the famous British spy, talked D'Arcy into parting with his contract, and thus was born the Anglo-Persian Oil Company, which would later become British Petroleum or BP.

In 1921, Reza Khan, an army officer, organised a *coup d'état* that left him as the country's shah and founder of the Pahlavi dynasty. The new shah acted to modernise the country while also managing to negotiate better terms with BP. In 1935, with the nation coming under increasing pressure from both Britain and Russia, the shah encouraged German commercial enterprise and changed the country's name from Persia to Iran (Farsi for "Aryan"). Britain and the Soviet Union simultaneously invaded Iran in 1941 and quickly overcame Iranian resistance. Reza Shah abdicated in favour of his son, who ascended the throne as Mohammad Reza Shah Pahlavi. In September 1943, Iran declared war on Germany.

After the war, Iran's prime minister, a land-owning aristocrat named Mohammad Mossadeq, nationalised BP's exclusive concession in order to satisfy the country's growing need for revenue to pay for modernisation. With this nationalisation of its oil fields, Iran would come to serve as an example for other resource-rich Third World countries. Mossadeq, a flamboyant populist leader, spoke prominently at the United Nations and was the 1951 *Time* magazine Man of the Year. Britain, furious, blockaded Iran and took its case against Mossadeq to the World Court—which ruled in Iran's favour.

In 1953, British intelligence and the CIA colluded to overthrow Mossadeq, with General Norman Schwarzkopf—father of the leader of the American forces during the *Desert Storm* operation in 1990—playing a key role in the plot. Once Mossadeq was gone (he spent his declining years under house arrest and died in 1967), the shah assumed dictatorial powers, granted oil rights to a consortium of British and American companies and established close ties with the United States.

Over the ensuing quarter-century, Shah Reza Pahlavi led efforts to industrialise his country, commissioning nuclear power plants from France and Germany during the early 1970s. In 1978, he refused BP's proposal for a 25-year renewal of its oil extraction agreement. The shah had outlived his usefulness.

In his book *A Century of War: Anglo-American Oil Politics and the New World Order* (Pluto Press, 2004, rev. ed.), William Engdahl sets forth the view that the fall of the Pahlavi dynasty and the installation of Ayatollah Khomeini in 1979 were engineered by British intelligence and the CIA as part of a Washington strategy, proudly masterminded by Zbigniew Brzezinski, to stoke the fires of radical Islam throughout the Middle East in order to undermine efforts at Arab nationalism. The thought was that countries like Iran and Iraq could be played off against one another, then later the US could sweep in and pick up the pieces. The radical Islamists would also serve to undermine Soviet ties in the region; they were at the centre of the Afghanistan war against the USSR and assisted in the later Balkans campaigns. They also would later provide a convenient new enemy to replace the Soviet Union after the end of the Cold War.

Covert connections between the new Iranian theocratic leadership and the incoming Reagan administration in the United States were demonstrated by the so-called October Surprise, which spelled the end of Jimmy Carter's presidency, and the guns-for-hostages deal, also known as the Iran–Contra scandal.

The Iran–Iraq war (1980–88) appears to have been covertly

fomented by the United States (which encouraged Saddam Hussein to attack) in order to weaken both countries—Iran being supported by Syria and Libya and receiving weaponry from North Korea and China (as well as the US), and Iraq enjoying wider support among both Arab and Western nations with the Soviet Union its largest arms supplier. War deaths were estimated at up to 1.5 million.

Khomeini died in 1989, and political power in Iran passed largely to the president, Rafsanjani, a more moderate leader (though the mullahs retained supreme authority). Rafsanjani, who sought better relations with the West in order to attract investment capital, was succeeded in 1997 by Khatami, the current president, also a moderate, who has pursued improved relations with the US and Saudi Arabia. However, as an Islamic republic, Iran often spouts anti-American rhetoric, and has recently courted closer economic and security ties with Russia and China.

Iran's oil endowment is both its treasure and its curse. According to Colin Campbell (writing in ASPO newsletter no. 32, August 2003), about 120 billion barrels of oil have been found in Iran, which made it a significant producer throughout the 20th century:

Most of the discovery to date lies in a few giant fields...which were mainly found by the Consortium in the 1960s based on prospects long known to BP's explorers... There have been recent reports of major discoveries at Bushehr, but it turns out that they are almost certainly long-known deposits of high sulphur heavy oil of no particular significance... Future discovery is here estimated at about 8 billion barrels, probably mainly coming from the offshore.

Campbell notes that Iran, a co-founder of OPEC in 1961, has the

"typical twin-peaked [oil production] profile of an OPEC country":

The first peak was passed in 1974 at 6.1 Mb/d, falling to a low of 1.2 Mb/d in 1980, before recovering to 3.4 Mb/d in 2002. Some reports suggest that depletion of present reserves is running as high as 7%, which may reflect operational shortcomings and lack of investment...

[P]roduction could in resource terms rise to a second peak in 2009 at almost 5 Mb/d before commencing its terminal decline at 2.6% a year, but operational and investment constraints may prevent such a level being reached in practice, with 3–4 Mb/d peak being perhaps more likely. Naturally, any new invasion would radically affect this forecast.

Campbell also notes: "The country's gas resources were very large indeed, totalling some 1000 Tcf."

Iran currently exports about 2.3 million barrels of oil per day (the world uses about 85 Mb/d).

WHY WOULD THE US ATTACK IRAN?

At first thought, it seems a US attack on Iran would seem foolish, given that the American military is already bogged down in neighbouring Iraq. However, there are three important reasons why the Bush administration might be more than willing to take up the immense risks involved.

Once Mossadeq was gone, the shah assumed dictatorial powers, granted oil rights to a consortium of British and American companies and established close ties with the United States.

The first, which is the one most widely discussed, is that Iran is reputedly seeking to develop nuclear weapons. Most Western intelligence agencies estimate that Iran is three to five years away from being able to produce bombs from scratch. However, missile delivery systems are already in place that could loft warheads to cities in Israel or to American bases throughout the Middle East and Central Asia. America is willing to countenance Pakistan's and Israel's nuclear capability, but these nations work with the US; Iran, in contrast, is independent and is making its own security deals with China, Russia and Venezuela, and would be considered a threat to Israel. From the Iranian perspective, though, the development of a nuclear deterrent makes perfect sense in view of the recent US invasion of neighbouring Iraq.

The second reason has to do with the challenge that Tehran presents to the US economy. According to recent news articles emanating from Iran, that country is planning to establish a regional oil stock exchange. A December 28, 2004, article in the London-based online publication IranMania.com notes:

Iran will move a step closer to establishing its much-publicised oil exchange next week, when the Oil Ministry and the Ministry of Economic Affairs and Finance are set to sign a memorandum of understanding (MoU), which will set the ground for the high-profile initiative.

Hossein Talebi, the National Iranian Oil Company's director for information technology affairs, told Fars news agency that the project would enter the executive phase immediately after the MoU is signed.

The official further said that petrochemicals, crude oil and oil and gas products will be traded at the petroleum exchange.

"The oil exchange would strive to make Iran the main hub for oil deals in the region," he said, adding that most deals will be conducted through the Internet...

Iran announced in September its petroleum exchange will become operational by March 2006...

(Source: <http://www.iranmania.com>)

As William Clark argues in his forthcoming book *Petrodollar Warfare* (New Society, summer 2005), the denomination of global oil sales in US dollars has kept the American dollar artificially strong throughout the period from 1974 to present, enabling Washington to run up huge foreign-funded government debt and trade deficits. Tehran's action, whether or not deliberately calculated to do so, could cause a dollar crash.

Iraq was the first nation to announce intentions to sell oil for euros instead of dollars (in November 2000), and one of the first acts of the provisional government put in place by invading US forces was to return oil sales to the dollar standard. In an article titled "The Real Reasons Why Iran is the Next Target: The Emerging Euro-denominated International Oil Marker" (October 27, 2004, <http://www.globalresearch.ca/articles/CLA410A.html>), Clark notes:

...Similar to the Iraq war, upcoming operations against Iran relate to the macroeconomics of 'petrodollar recycling' and the unpublicized but real challenge to US dollar supremacy from the euro as an alternative oil transaction currency...

Candidly stated, 'Operation Iraqi Freedom' was a war designed to install a pro-US puppet in Iraq, establish multiple US military bases before the onset of Peak Oil, and to reconvert Iraq back to petrodollars while hoping to thwart further OPEC momentum towards the euro as an alternative oil-transaction currency...

From a purely economic and monetary perspective, a petroeuro system is a logical development given that the European Union imports more oil from OPEC producers than does the US, and the EU accounts for 45% of imports into the Middle East...

One of the Federal Reserve's nightmares may begin to unfold in 2005 or 2006, when it appears international buyers will have a choice of buying a barrel of oil for \$50 dollars on the NYMEX and IPE—or purchase a barrel of oil for E37 – E40 via the Iranian Bourse...

A successful Iranian Bourse would solidify the petroeuro as an alternative oil-transaction currency, and thereby end the petrodollar's hegemonic status as the monopoly oil currency...

A third reason for the US to invade Iran arises from long-term American geopolitical strategy: Iran is one of the few important oil exporters without a US military presence (others include Russia and Venezuela). Further, Iran is strategically located between Afghanistan and Iraq, bridging the Middle East and Central Asia, and its control is thus essential for US domination of those oil-rich regions.

With the approach of Peak Oil, the world has entered the end-game phase of the industrial interval. If the US does not gain a stranglehold on world resource streams, then China—now the world's main consumer of steel, grain, meat and coal—will do so. Already China is gaining long-term oil contracts in Saudi Arabia, Iran, Venezuela and Nigeria; the Chinese are even seeking a sizeable portion of Canadian oil production and have actually attempted to buy an American oil company (Unocal).

While on the surface the US and China are politely trading (Americans buy cheap Chinese goods, the Chinese invest their earnings in US Treasury Bills in order to enable Americans to



"The President's policy is quite strategic. We only invade countries he can pronounce."

afford even more Chinese imports), beneath the surface both are angling for a superior position as the final game begins. If the US merely stands by, its economy will be destroyed when China eventually sells off its dollar holdings, and America will land on the ash heap of failed empires.

The latter's only hope of continued glory is to play its remaining strong card—its spectacularly lethal weapons of mass death—in an effort to maintain control of global resource flows. The US faces immense risks in an attack, as will be discussed below. However, given its stated priorities, it can hardly demur from taking up those risks.

EVIDENCE THAT AN ATTACK IS BEING PLANNED

In an article titled "The Coming Wars", posted on January 17 and published in *The New Yorker* (January 24–31, 2005), veteran investigative journalist Seymour Hersh reported that US

commando teams have been operating in Iran for months, carrying out secret reconnaissance missions to learn about nuclear, chemical and missile sites in preparation for possible air strikes. Hersh also says that the administration's aims could include not just the thwarting of Iran's nuclear ambitions, but regime change as well.

Citing a former high-level intelligence official, Hersh claims that "Secretary of Defense Donald Rumsfeld met with the Joint Chiefs of Staff shortly after the election and told them, in essence, that the naysayers had been heard and the American people did not accept their message":

"This is a war against terrorism, and Iraq is just one campaign. The Bush Administration is looking at this as a huge war zone," the former high-level intelligence official told me. "Next, we're going to have the Iranian campaign. We've declared war and the bad guys, wherever they are, are the enemy. This is the last hurrah—we've got four years, and want to come out of this saying we won the war on terrorism."

(Source: <http://tinyurl.com/3nqvo>)

While Bush administration officials dispute Hersh's allegations, other reporters and news agencies are publishing corroborating information. An Al Jazeera article of February 6 ("U.S.–Israel plan to strike Iran's nuclear sites finalized") claims:

Experts from the US Defense Department, the Pentagon and Israel have put final touches to a plan to launch a military strike targeting Iran's nuclear facilities, experts at the European Commission based in Brussels revealed on Sunday.

The experts added that the implementation of this plan rested on a number of factors including the US continuous efforts to hamper the EU–Iranian negotiations to persuade Iran to suspend all activities related to uranium enrichment, with the aim of justifying a military strike against the Islamic republic if it refused to bow to US pressures...

Yesterday, American news sources reported that US senators have set up a review panel of the CIA's intelligence on Iran in order to try and avoid the pitfalls that marked the lead-up to the invasion of Iraq.

(Source: <http://tinyurl.com/47mkm>)

Meanwhile, George W. Bush has announced the appointment of Elliott Abrams, previously in charge of Middle East affairs, to the office of deputy national security adviser. Abrams, who pleaded guilty in 1991 to withholding information from Congress (and was pardoned by George H. W. Bush), will now be supervising the current president's strategy for "advancing democracy", according to the *Washington Post* (February 3). Many regard Abrams as one of the foremost proponents of the neoconservative agenda in Washington; he authored the chapter on the Middle East in the 2000 blueprint for US foreign policy by the Project on the New American Century (PNAC).

Many observers do not appreciate how different the neoconservative mindset is from that of the previous foreign policy consensus. For example, the neoconservatives view America's war against the Vietnamese as a mistake only in that insufficient force was used: several neocons have opined that the US should have

employed whatever means were necessary, including nuclear weapons, to prevail in that effort.

PNAC literature bristles with complaints, accusations and threats directed against Tehran. During the early months of the first term in the George W. Bush administration, neoconservatives were often quoted as saying: "Everybody wants to go to Baghdad; real men want to go to Tehran."

Weekly Standard editor William Kristol, on a PNAC website (July 20, 2004, <http://tinyurl.com/6exnl>), after a litany of

indictments of Iran, concludes: "We do need a coherent, serious policy toward Iran; one of containment, pressure, accountability and, ultimately, regime change."

President Bush, in his State of the Union address on February 2, pointedly noted: "Today, Iran remains the world's primary state sponsor of terror, pursuing nuclear weapons while depriving its people of the freedom they seek and deserve."

This past month, Senator Rick Santorum (R–Pennsylvania) was said

to be at work on the "Iran Freedom and Support Act", a bill apparently designed to help prepare America psychologically for an attack on Tehran. Santorum told Fox News: "By supporting the people of Iran, and through greater outreach to pro-democracy groups, we will hopefully foster a peaceful transition to democracy in Iran. The bill also notes the futility of working with the Iranian government."

Meanwhile, new US Secretary of State Condoleezza Rice is sending conflicting signals. On February 4, she claimed a US attack on Iran "is simply not on the agenda", though she would not say whether the US supports regime change in the country. Yet only five days later, she warned Iran of consequences if its nuclear program is not abandoned. One can hardly help but recall similar contradictory statements from officials in the year leading up to the invasion of Iraq. On February 17, George W. Bush pledged to support Israel if it bombs Iran in an effort to destroy the Islamic regime's capacity to make an atomic bomb. Asked whether he would back Israel if it raided Tehran's nuclear facilities, Bush said: "Clearly, if I was the leader of Israel and I'd listened to some of the statements by the Iranian ayatollahs that

Seymour Hersh reported that US commando teams have been operating in Iran for months, carrying out secret reconnaissance missions ... in preparation for possible air strikes.

regarded the security of my country, I'd be concerned about Iran having a nuclear weapon as well. And in that Israel is our ally, and in that we've made a very strong commitment to support Israel, we will support Israel if her security is threatened."

Meanwhile, rumours mount. On February 18, Scott Ritter, a former US Marine and UN weapons inspector in Iraq, in a talk delivered to a packed house in Olympia's Capitol Theater in Washington State, claimed on the basis of inside information that Bush has "signed off" on plans to bomb Iran in June 2005.

While European diplomatic efforts seek to head off a military confrontation, "In private," as Guy Dinsmore notes in a *Financial Times* article of February 14 ("Would Condi and Dubbya Really Start Another War?"), "European officials say the best they can do is to buy time, perhaps to the end of the year".

POSSIBLE CONSEQUENCES OF AN ATTACK ON IRAN

What would be the likely results of an American attack on Iran?

In the fall of 2004, *The Atlantic* conducted a war-games think-tank, as reported in the December 2004 issue in an article by James Fallows ("Will Iran be Next?"). The magazine hired retired military strategists to come together and, in discussions, play out three possible scenarios:

- a limited attack on Iran's nuclear research facilities;
- an air attack on the Republican Guard designed to destroy Iranian overall military capability; and
- an all-out invasion aimed at regime change.

Each ended with unacceptable consequences. The attack on nuclear facilities, the participants agreed, would be unlikely to stop research and would probably only redouble Iranian resolve to develop nuclear weapons. An air attack on Iranian military units would provoke retaliation against US forces in Iraq. And a full-on invasion would entail US casualties and an ongoing occupation and guerrilla warfare.

The war-games leader, retired Air Force Col. Sam Gardiner (who ran war games at the National War College for more than two decades), summarised the group's conclusions: "After all this effort, I am left with two simple sentences for policymakers: You have no military solution for the issues of Iran. And you have to make diplomacy work."

Nevertheless, despite the counterproductiveness of the likely outcomes, the war-gamers could not rule out the likelihood that the US would pursue one or more of these strategies. "Companies deciding which kinds of toothpaste to market have much more rigorous, established decision-making procedures to refer to than the most senior officials of the US government deciding whether or not to go to war," said Michael Mazarr, a professor of national-security strategy at the National War College. Thomas Hammes, a Marine expert in counterinsurgency, added: "You can never assume that just because a government knows something is unviable, it won't go ahead and do it. The Iraqis knew it was unviable to invade Iran, but they still did it. History shows that countries make very serious mistakes."

The neoconservatives appear to have a view of the situation that is not reflected in these war-games. They evidently believe that, after the first strikes, the Iranian regime will simply collapse. Hersh (in *The New Yorker*, January 24–31, 2005) writes:

Scott Ritter, a former US Marine and UN weapons inspector in Iraq, claims that Bush has "signed off" on plans to bomb Iran in June 2005.

The government is urging a limited attack on Iran because they believe it could lead to a toppling of the religious leadership. "Within the soul of Iran there is a struggle between secular nationalists and reformers, on the one hand, and, on the other hand, the fundamentalist Islamic movement," the consultant told me. "The minute the aura of invincibility which the mullahs enjoy is shattered, and with it the ability to hoodwink the West, the Iranian regime will collapse"—like the former Communist regimes in Romania, East Germany, and the Soviet Union. Rumsfeld and Wolfowitz share that belief, he said.

However, Hersh notes that Iran experts dispute the likelihood of a quick collapse of the Tehran regime, and say that a more likely consequence would be a stiffening of Iranian opposition.

Again, one cannot help recalling how similar expectations were voiced by administration insiders prior to the Iraq invasion—and how those expectations were dashed. The US administration appears to be cherry-picking expert advice, accepting only those

views that coincide with what higher-ups want to hear. This is evidently a policy emanating from top levels: George W. Bush himself is said to have told advisers that he wants to hear only good news.

However, the news following an invasion might be anything but good. According to a Reuters report by Amir Paivar, "Iran Promises 'Burning Hell' for Any Aggressor", dated Thursday, February 10, 2005:

Iran, facing mounting US pressure over its nuclear program, promised Thursday a "burning hell" for any aggressor as tens of

thousands marched to mark the 26th anniversary of its Islamic revolution.

"The Iranian nation does not seek war, does not seek violence and dispute. But the world must know that this nation will not tolerate any invasion," President Mohammad Khatami said in a fiery speech to the crowd in central Tehran.

"The whole Iranian nation is united against any threat or attack. If the invaders reach Iran, the country will turn into a burning hell for them," he added, as the crowd, braving heavy snow blizzards, chanted "Death to America!"

While such threats can mostly be chalked up to bluff and bravado (most of the Iranian war machinery is outdated and worn), Tehran does possess some weapons that are accurate and destructive—far more so than any used by Saddam Hussein against American forces. An example is the Russian-made *Sunburn* cruise missile, specifically designed to defeat the US *Aegis* radar defence system and said to be the most lethal anti-ship weapon in the world.

If attacked, Iran would likely foment a Shi'ite rebellion in Iraq against US occupation forces, an insurgency that might far surpass in extent and deadlines the current Sunni-led resistance. Moreover, Tehran might also unleash its 300 North Korean-engineered *Shahab-3* ballistic missiles on US bases in Qatar, Saudi Arabia, Uzbekistan, Afghanistan and Iraq. If Iran were invaded, its tactic would be to wage a guerrilla war similar to that undertaken by the Sunni-led resistance in Iraq. Tehran has

already announced efforts to increase the size of its seven-million-strong Basiji militia forces, which were deployed in human wave attacks against Iraq during the 1980s. According to news reports, tens of thousands of rifles are currently being handed out.

A US attack could have serious implications for international relations. Iran has spent the past few years cementing economic and military ties with China, Russia and the EU, and such efforts have intensified dramatically within past weeks. These nations, to varying degrees, view the US as a superpower that has outlived much of its usefulness to the rest of the world.

The US is now a liability in many respects: its immense national debt and trade deficits weigh down the global economy; its profligate consumption of resources leaves less to go around for other nations; its refusal to sign the Kyoto accord ensures a century of environmental collapse; and its arrogant militarism serves to undermine any hopes for cooperative solutions to future contests over dwindling resources.

No government wants to take on the US militarily. But Washington appears determined to control the choke-points of global resource flows. Thus the leaders of China, Russia—and, to a lesser extent, even those of the EU—would in their own view be acting in self-defence by drawing a line in the sand around Iran. Indeed, in recent weeks, Russia has begun selling some of its more advanced missiles to Syria, Venezuela and Iran, just as the US has amped up its rhetoric against these countries.

LIKELY SCENARIOS

What can we expect in the weeks and months ahead? Over the short term, we will see diplomatic wrangling and the seeding of news stories with inflammatory comments from unnamed government sources.

An example of the latter is a Reuters article ("Iran Will Know How to Build Bomb in 6 Months – Israel") by Andrew Cawthorne, dated February 15, in which anonymous Israeli officials are quoted as saying that Tehran is much closer to having atomic weapons than most US and European experts have estimated.

If and when the EU's talks with Iran break down, China and Russia seem likely to block any UN Security Council resolution designed to impose sanctions on Tehran. The US is no more likely to find support for punitive measures among the G8 nations, since Japan obtains about 15 per cent of its oil from Iran and has few easy alternative sources to make up the difference in the event of a trade embargo.

As noted above, the Bush administration evidently feels that an attack on Iran would result in a quick collapse of the government, and so Iranian dissident groups are no doubt being prepared to step into the power vacuum that might emerge. However, if the neoconservatives are as wrong here as they were in Iraq and the Tehran regime did *not* fall, then the US would be presented with a dilemma. If it withdrew, it would face defeat and humiliation. But a pursuit of invasion and militarily enforced regime change would be extremely costly in terms of dollars and human lives. How to justify either effort to the American people?

Because the likely outcomes are unpalatable, and because the ongoing occupation of neighbouring Iraq is not going well,

American officials would find it nearly impossible to launch an attack on Iran without having an adequate immediate pretext. Therefore Iran must be enticed to attack the US, or must be made to appear to do so.

The most likely scenario would be for Israel to take the lead in bombing Iranian nuclear facilities. To Tehran, this would signify US involvement, as Israeli planes would likely fly over US-controlled Iraqi air space. Iran would then predictably retaliate against both Israel and the US, perhaps by launching *Scud* missiles toward Israel and *Sunburn* cruise missiles against one or more American warships stationed in the Persian Gulf. The loss of an aircraft carrier or battleship with hundreds or thousands of American sailors on board could then summon a sufficient emotional response from the American people so that the full resources of the nation (including an immediate re-institution of the draft) could be mustered behind a three-pronged invasion of Iran from Iraq, Afghanistan and the Gulf.

Alternatively, if Iran did not take the bait and sink a US warship, Israel could do so under false flag, with the American people being told that the Iranian mullahs were to blame. Or an American city could be attacked from within by "terrorists", with Tehran again being assigned the guilt.

These events are most likely to commence before the end of 2005, as Iran cannot be permitted to open its oil bourse in March 2006.

Once the chain of events begins, it is anyone's guess how it might unwind over the ensuing weeks, months and perhaps even years. It seems more than likely that China would take this as an opportunity to dump its dollar holdings on world markets, thus tipping the US economy into a depression. Russia's response can only be guessed at.

Domestically, the US would likely institute draconian measures to monitor citizens' "patriotism" and severely restrict the freedoms of those who questioned the government's actions. And the US might well take the opportunity to widen the war to Venezuela and other sites of "tyranny" around the world.

While the Iraq invasion and its aftermath have been immensely destructive events, there are signs that what is in store will be far, far worse.

About the Author:

Richard Heinberg is the author of six books including *The Party's Over: Oil, War and the Fate of Industrial Societies* (New Society, 2003; reviewed in NEXUS 10/01), and *Powerdown: Options and Actions for a Post-Carbon World* (New Society, 2004). He is a journalist and lecturer, an educator and editor, and also a core faculty member of New College of California where he teaches a program on "Culture, Ecology and Sustainable Community". His monthly *MuseLetter*, now in its 14th year of publication, was nominated in 1994 for an Alternative Press Award. Richard Heinberg's previous article reprinted in NEXUS, "The Endangered US Dollar" (see 12/01), was first published in *MuseLetter* #149, August 2004. This current article was first published as "Onward to Iran" in *MuseLetter* #155, March 2005. Visit the *MuseLetter* website at <http://www.museletter.com>.

These events are most likely to commence before the end of 2005, as Iran cannot be permitted to open its oil bourse in March 2006.

THE PERSECUTION AND RESISTANCE OF LOÏC LE RIBAUT

**French geologist
and forensic
scientist Loïc Le
Ribault developed
an organic silica
treatment for
arthritis and many
other illnesses but
fell out with the
medical orthodoxy,
the justice system
and the
pharmaceutical
corporations in the
process.**

by Martin J. Walker © 2004

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[http://www.communicationagents.com/
emma_holister/2004/11/24/
loic_le_ribaults_resistance.htm](http://www.communicationagents.com/emma_holister/2004/11/24/loic_le_ribaults_resistance.htm)

I shall continue my actions of distributing OS5 despite all the opposition. I do it for all those patients for whom I have the opportunity and honour of caring, those who were abandoned by modern medicine which was unable to offer them a cure or who found the orthodox treatments offered worse than the illness itself.

– Loïc Le Ribault

Loïc Le Ribault, France's most renowned forensic scientist¹ and specialist in the study of silica, holds court in the dingy surroundings of the Flying Fish pub on the harbour in St Helier, Jersey. With a Gallic shrug and in faltering English, he explains how the pub has become his home and his office.

He knows almost everyone in the bar, as he knows the bus drivers, the local shopkeepers and many of the harbour's boat owners. He knows them because he has "treated them, for this illness and that illness". "Many of them I have cured with OS5," he says.

Sitting in the Flying Fish, drinking bitter and smoking the occasional Gauloise, Le Ribault does not seem like a man who has been hounded out of France because he discovered and distributed a treatment for arthritis and a number of other common ailments.

In 1985, while working as an independent forensic scientist for the French judiciary, Le Ribault joined forces with a highly acclaimed research chemist, Professor Norbert Duffaut from the University of Bordeaux. Between them, they hoped to develop their common work on organic silica, a substance which they believed to have a wide range of therapeutic uses. But after 12 years of work together, Duffaut was dead, poisoned in suspicious circumstances perhaps as a consequence of their work on the new therapy, and Le Ribault himself had suffered two months' solitary confinement in a French prison.

Today, Le Ribault is on his own, forced to ground in Jersey, a stateless alien on the run from the French police, his life turned into a desperate adventure. He is paying the price for falling out with the scientific orthodoxy, medical professionals and the French establishment.

Loïc Le Ribault appears quintessentially French. He is phlegmatic, and when he is not laughing gently and self-deprecatingly his rubbery face deflates with the world-weary sadness of a circus clown. His well-worn casual clothes, his white wings of cotton wool hair floating around the bald dome of his head and his lack of fluent English, for which he constantly apologises, make Le Ribault appear wise but forgetful. Listening to him, you have to keep reminding yourself that over the last five years he has lost everything but his mind.

EARLY PROMISE IN A GRAIN OF SAND

Thirty years ago, still in his twenties, Loïc Le Ribault was a precocious young academic, having groundbreaking papers published by the French Academy of Sciences. At twenty-four, in 1971, he discovered a new function for the electron scanning microscope (ESM) which enabled him to discern the history of grains of sand.

Previously the electron scanning microscope, capable at that time of 30,000x magnification, had been used in biology and medicine and no one had imagined that it might be used for looking at rocks. Under the ESM, Le Ribault found that he could discern the entire history of a grain of sand: where and when it had originated, how it had been formed, where and how it had been transported, where it had next lodged, how long it had stayed in that place.

By the time he had finished his research, he had devised a list of 250 criteria by which the history of sand might be diagnosed. The field was later to become so specialised that it would take three years to train a scientist in the technical knowledge to carry out these tests.²

Le Ribault's approach to analysis and detection of sand had some academic and commercial uses but was most clearly an invaluable aid to policing. While still working at university, he was approached by the US Federal Bureau of Investigation (FBI) and became a forensic consultant for them.

Despite this early discovery of a new use for the ESM, Le Ribault found it hard to get work in the universities after he'd qualified. So in 1982, he set up his own national laboratory for electron microscopy, called CARME, and quickly became France's most noted forensic scientist. CARME became the principal laboratory used by the police service, the judiciary and the French Home Office.

Le Ribault is the first to admit that he is not a diplomat, even that he is anarchistic in his view of society. Constant struggles between himself and the French Home Office, seemingly about hegemony, did not endear him to servants of the State. At the height of CARME's work, Le Ribault was a nationally recognised figure with a high public profile, working and commenting on some of France's most intriguing criminal, military and political cases. Always a populist, he was much sought after by television, radio and the newspapers as well as by the French political parties.

"When I had CARME, every week I had articles in the press and on TV, and every French party asked me to be involved with them. On TV and in newspapers, I made information accessible. Very often I did lectures in primary and secondary schools as well as universities."

The French Home Office and the police service seemed to have been wary of Le Ribault's cavalier genius as well as his tacit control of Home Office forensics, despite his brilliant record as an expert witness. He says that the French State frequently referred to him as *their* scientist and to his laboratory as that of the Home Office.

Le Ribault's career as France's most eminent forensic scientist came to a sudden end in 1991 when the Home Office decided to integrate its own regional forensic laboratories equipped with electron microscopes. In the following debacle, Le Ribault lost his laboratory, which had employed 30-odd people, and his home, which he had mortgaged as surety for the laboratory.

A resilient character, Le Ribault adapted to his new life, lived in the family home and returned to his first love, silica. Back in 1972, while working with sand on the ESM, he had made an interesting discovery: that a layer of water-soluble amorphous silica which contained micro-organisms covered the surface of some sand grains. He found that these micro-organisms and the secretions which they left on the sand contained organic silica. Organic silica differs from mineral silica which makes up the majority of the Earth's crust, in that it contains carbon and can be readily assimilated by animals. By 1975, Le Ribault had created a process by which it was possible to recover these deposits from the surface of the sand.

All of this work was accepted by the scientific establishment

and his papers published by the French Academy of Sciences.

There had been constant research into organic silica over the previous 50 years and some of this had raised questions about the therapeutic use of this substance. In his early work as a geologist, Le Ribault had not been following the research into silica and health. But in the early 1980s, while working on these organic silica deposits, he found that after immersing his hands in organic silica solution his psoriasis was cured. From then on, Le Ribault focused his work on silica's therapeutic properties.

FROM POLLUTANT TO ESSENTIAL NUTRIENT

Silica is an essential element of living matter. It is found in body tissue, the thymus gland, the vascular lining, the adrenal glands, the liver, the spleen, the pancreas and in considerable quantity in hair. With ageing, the body loses its store of organic silica and is unable to replace it from sources outside the body which are predominantly mineral silica.

It was originally thought that silica is at worst an environmental contaminant of the human body and at best an element which quickly passes through the body and is excreted. These ideas

were based almost entirely upon observations of mineral silica, which in the form of dust and particles was responsible for a number of serious illnesses such as silicosis.

Silica in mineral form had been used therapeutically, but it was absorbed inefficiently into the human body. It had traditionally gained a place in the pantheon of herbal remedies, being present in horsetail fern and some vegetables.

Work since the 1930s on absorbable mineral and organic silica showed irrefutably that organic silica could be described as an essential

nutrient for both humans and other animals.³ It is necessary for early calcification of bones and animals' shells and its deficiency has been found to produce alterations and abnormalities in bone growth. It has also been observed that silica plays a part in the make-up of the cells which form blood vessel walls. Perhaps most importantly, silica has been found to directly affect and form a large part of the connective tissue and cartilage, which play an important part in joints and the illnesses which affect them.

In studies during the 1970s, it was found that silica supplementation aided bone and cartilage growth. In 1993, it was reported that treatment with silica could stimulate bone formation. By the 1990s, silica formulations were being used by some pharmaceutical companies on wound and burn dressings because it was recognised that silica healed wounds more quickly and could stabilise burns.^{4,5}

NORBERT DUFFAUT: A MAN "ON THE MOON"

In 1982, Le Ribault began work with Professor Norbert Duffaut, a chemist and research engineer at the CNRS (the National Centre for Scientific Research) situated at the University of Bordeaux. In 1957, Duffaut had synthesised a molecule of organic silica which was capable of being absorbed by the human body. Unlike Le Ribault, Duffaut had been using his organic silica as a therapeutic agent, treating patients since his first discoveries in the 1950s. Like Ribault, Duffaut had paid little attention to the academic papers on organic silica, convinced he was ahead of the field.

While still working at university, Le Ribault was approached by the US Federal Bureau of Investigation (FBI) and became a forensic consultant for them.

By the time Le Ribault and Duffaut first met, Duffaut had been treating people for years and was well known in the southwest of France and even in Paris. Duffaut had created NDR, the Norbert Duffaut Remedy, and had manufactured many litres for thousands and thousands of patients.

Whether to avoid the regulatory agencies or simply out of sheer cussedness, Duffaut refused to keep any records of his transactions. "He absolutely refused to keep a record of anything which he did," says Le Ribault. "He would say, 'We are right; we will win in the end!'"

By 1958 Duffaut had begun clinical work with Dr Jacques Janet, a gastroenterologist, and had also begun treating people, very successfully, for arthritis. However, Duffaut was sure that cardiovascular work and blood circulation work were the most important therapeutic goals in relation to organic silica. So in the 1960s Duffaut worked with Dr Rager, a cardiovascular surgeon, who used organic silica for post-operative recovery.

In 1967, Rager was awarded the J. Levy Bricker Prize by the French Academy of Medicine for his work on the use of organic silica in the treatment of man. Rager's work also determined that organic silica helped cancer patients withstand chemotherapy.

Le Ribault and Duffaut had more in common than a passion for silica. Duffaut, in his sixties, was considered by many to be an impossibly difficult man. Le Ribault, speaking with sadness but with his usual humour, says of Duffaut:

"He was less diplomatic than me. A lot less diplomatic than me! Can you imagine? He was impossible. He considered that the system was made up of stupid people; he was right, of course, but he *said it to them* on many occasions. He was eccentric, very much an individualist. I guess I was the only person able to work with him."

Like Le Ribault, Duffaut also used humour to shield himself from the deeper conflicts. "Duffaut was a very, very clever man, really a genius, a high-level chemist who was always singing and joking and smiling, all the day long—every day!" Le Ribault fondly remembers an unmarried man, utterly immersed in his scientific work, cut off from the humdrum intercourse of the everyday world to such an extent, Le Ribault jokes, that he was "on the Moon" for much of the time.

Duffaut had been testing his *synthetic* organic silica molecule therapeutically for 15 years by the time he met Le Ribault, and had frequently offered his invention free to the French State and its medical research organisations. All his approaches had been met with utter, seemingly deliberate, silence.

In 1985, Duffaut and Le Ribault took out an international patent to protect the therapeutic use of organic silica. And in 1987, like many other publicly concerned scientists outside the pharmaceutical companies, they made representations to the French minister for research, asking that he consider their discovery for trials in cases of AIDS-related illnesses.

So determined were they to force government recognition of the health-giving qualities of silica that they had their request, and the

evidence to support it, legally served on the minister. Duffaut and Le Ribault received no reply.

In November 1993, Duffaut was found dead in his bed by neighbours who noticed he had not been out of his house that day. Despite the fact that Duffaut was in his early seventies and had died in bed, a post-mortem was held and potassium cyanide was found in his system. Although no letter was found, and despite the fact that witnesses had seen Duffaut the night before in good spirits, the police concluded that he had committed suicide.

Initially Le Ribault accepted the suicide of his colleague, but later he began to have doubts. His principal doubt is that Duffaut, a highly trained chemist, would have chosen potassium cyanide as a vehicle for suicide, knowing that it would occasion an incredibly painful death.

Duffaut's writing prior to his death did show a despondency clearly brought about by continual disappointment and frustration. His last notes contained the sentence, "The authorities have condemned my discovery out of hand without having even tested it".

RESEARCH INTO ORGANIC SILICA THERAPEUTICS

As his work progressed with Duffaut, Loïc Le Ribault found that, in his mind, there were few academic considerations on the therapeutic uses of organic silica. He was preoccupied throughout the 1980s and early 1990s with trying to make the organic silica, which Duffaut had been using for compresses, drinkable.

"One of the most serious difficulties was trying to make G5 drinkable. The solution we had created was slightly toxic, alright for using on the skin but not for drinking. Perhaps no more toxic than red wine, but I didn't want it to be at all toxic."

When Le Ribault discovered the effect of organic silica on his psoriasis, he was sceptical about the long-term therapeutic value of his discovery. However, after two or three years of working with a number of doctors who

used the discovery on patients and after his years of work with Duffaut, he decided that he was in a position to send files to the Ministry of Health, asking it to carry out trials on the basis that he would supply the solutions for free.

He did not receive answers to his many communications. The private treatment of patients did not fit with either Le Ribault's or Duffaut's ideas about health care, so both wanted the French government to take up the idea of organic silica.

By the mid-1990s, Le Ribault and Duffaut between them had treated well over 10,000 people, firstly with organic silica poultices and then with a drinkable tonic.

Determined to make his findings of public consequence, Le Ribault arranged personal meetings in America with the chairmen of the main pharmaceutical laboratories; he travelled to visit executives in Canada, and the length and breadth of France.

All the people he met showed interest and most told him they would be in touch within weeks. As he now says, "I have been waiting fifteen years for a reply". One executive of a pharmaceutical company offered him £1,000,000 just to bury his discovery.

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REGULATING MOLECULES

At the end of 1994, Le Ribault, now working on his own with an organic silica molecule suspended in water, which he called G5, stepped up production and distribution to people with health problems. It was Le Ribault's case that as a natural, non-toxic substance, G5 did not need a licence; he saw it as a tonic or dietary supplement.

The problem of who pays to test a novel medical product, developed outside the pharmaceutical companies, has become a serious issue in America and Europe. On the boundaries of different kinds of medical treatment, constant war is being waged. Trade and practice with non-pharmaceutical treatments are constantly being attacked by big companies. The most common aggressors in this war of attrition are the pharmaceutical companies. With close allies in the regulatory agencies, university research departments, hospital trusts and the media, the pharmcos have a strategy of whittling away at the number of herbs that are legally available and constantly attempting to restrict the availability of vitamins and food supplements.

The highly capitalised pharmaceutical companies can afford to compete with each other, paying hundreds of thousands, often millions, of pounds to carry out trials and then thousands of pounds for preparatory paperwork so their cases can be put before the regulatory agencies. When they have obtained licences, they use aggressive marketing strategies, regulatory protection and sometimes "dirty tricks" to ensure their competitive ascendancy.

Herbalists, homoeopaths, nutritional therapists and those producers and practitioners who work with non-pharmaceutical treatments, and who are unable to raise the money or hire sympathetic laboratories to carry out trials, are forced to market and use their treatments with one hand tied behind their back, unable to advertise any health-enhancing effects of any of their therapies.

Some few innovators are fortunate achieving special discretionary awards from the FDA in America or from the Medicines Control Agency or MAFF [now DEFRA, the Department for Environment, Food and Rural Affairs; Ed.] in Britain, which exempt their natural therapies from the need to be licensed.⁶ The progress of these odd treatments is irregular and haphazard and is probably dependent upon whether or not there is competition from pharmaceutical products.

The competitive, financial and professional censorship by multinationals and doctors of novel natural health therapies, at this lower end of the health-care market, has inevitably spawned "illegal" businesses and made criminals out of some doctors, scientists and therapists. But perhaps more importantly, in an odd way, the pharmaceutically protective regulations and their policing have also created criminals out of many patients. By denying patients the freedom to choose their own treatments, the laws and the regulatory agencies have forced some patients into an underground health-care culture.

It was into this maelstrom of pharmaceutical protection,

pharmco-biased regulation and confused policing that Le Ribault, tired of the invisibility of the authorities and angered by the strange death of his colleague, launched G5 in 1994. Le Ribault's determination to confront the big companies and the regulatory agencies was to bring his life collapsing about him.

PUBLICITY AND CONSPIRACY

Soon after Le Ribault began to distribute G5, in June 1995 Jean-Michel Graille, a journalist on *Sud-Ouest Dimanche*, approached him and asked if he could write about his discovery. Ten years previously, Graille had written a book titled *Dossier Priore: une nouvelle affaire Pasteur?*⁷ After getting agreement from his editor, Graille attached himself to Le Ribault for four months, observing his work as a scientist, innovator and now entrepreneur. After some initial scepticism, Graille became completely convinced of the therapeutic effects of Le Ribault's discovery. In October 1995, *Sud-Ouest Dimanche* published, across five pages of its magazine, a detailed account of Le Ribault's work and the suppression of his findings.

The publication of this article had unbelievable results that dragged Le Ribault into an uncontrollable conflict with the judiciary and other, more hidden, forces.

In the days following publication, Le Ribault received 35,000 phone calls, letters and visiting patients.

He was obliged to rent a hotel and call scientists, doctors and personal friends to help sort out the calls and callers. *Sud-Ouest Dimanche* had to hire eight receptionists to answer calls. The local telephone service broke down and the phone lines to police stations and post offices were blocked for days.

In the three months that followed the article, Le Ribault did his best to treat the thousands of people who converged on the area, seeking help. He says now that pharmacies in the area lost around 35% of their turnover in this tidal wave.

The article had other, more sinister, results. Le Ribault claims that as soon as it came out, other newspapers were warned not to publish articles. He

received frequent death threats, his house was burgled and his collaborators were threatened.

One middle-aged woman, who had been his aide for many years, was attacked, seriously wounded and held hostage for an hour in Le Ribault's house. He and his colleague knew the assailant, a Marseilles criminal who had tried to force Le Ribault to give him a franchise on G5. The police did nothing when they were informed.

Either by conspiracy or simple criminal opportunism, companies suddenly began to spring up claiming to be using organic silica for health therapies. Many of these companies used Le Ribault's and Duffaut's names and their photographs and even faked their signatures. Illegal advertising material flooded the market using quotes from Graille's article. Le Ribault later saw public laboratory analysis of these products, which he says were water or mineral silica or a dangerous, unstable synthesis of organic silica.

One executive of a pharmaceutical company offered him £1,000,000 just to bury his discovery.

Le Ribault had nothing to do with these ventures, but in January 1996, after a number of apparently genuine complaints had been received about these fake products, the Order of Doctors and the Order of Pharmacologists, the professional institutions which protect the interests of doctors and pharmacists throughout France, laid a complaint against Le Ribault before an examining magistrate, citing the illegal practices of medicine and pharmacology. Initially, with the naivety of one divorced from politics, Le Ribault was pleased that the complaint had been lodged: "...this was something which I had been looking for, something which I expected. I thought that now the court would be obliged to instruct someone to make the tests." Le Ribault had about six months' grace before the hearing was due.

In the midst of these assaults, Le Ribault was unable to perceive that an all-out campaign had begun, the objective of which was to put an end to the therapeutic use of his discovery. His confusion and unhappiness were deepened by the death of Jean-Michel Graille in April 1996. Graille, perhaps his most articulate public supporter, died suddenly and unexpectedly, aged fifty, of a stroke while relaxing in his garden.

STRANDED IN ANTIGUA

Le Ribault looks back with some mirth upon his own unworldliness and the dangers which he has faced. His most self-deprecating tale, in an otherwise dark melodrama, is the story of how he came to end up in Antigua.

Following the publication of Graille's story, many individuals sent money, £500,000 in total, to enable Le Ribault to build a clinic. Amongst the sharks who suddenly appeared wanting a piece of the action was a group of businessmen who sought to advise Le Ribault on setting up a company. He took their advice, transferring the control of the new company to nominee shareholders suggested by the group.

After some discussion and planning, Le Ribault was told that contacts had been made and bank accounts opened for him to set up his clinic in Antigua. His passport had been stolen in the house burglary, so with his fare paid by the company he set off for Antigua, undercover, via the French protectorate of Martinique. It was only when he'd landed in Antigua and found no one there to meet him that he began to realise he was alone on the other side of the world with no passport, no English language, no funds and no friends.

"I was told that the prime minister himself would be waiting for me in Antigua with a diplomatic passport and I would be free to travel. I was told that there was a bank account for me and everything was ready to start the clinic. Of course, when I got there, no one was waiting for me. I had only three small bottles of G5."

As resourceful as ever, Le Ribault began treating the rich, elderly and often arthritic boat owners as they returned from a day's sailing around the coast. At the end of his first day's work, he had a hundred pounds and appointments for the whole of the following week.

A week later, he had enough money to travel back to France, had he wanted to. By his own perseverance, Le Ribault made the contacts himself which should have been made for him in Antigua.

"I got permission from the prime minister to start a health centre. I had two kinds of patients. Local patients who had no money, and I never asked for money from them—they paid what they were able for their treatment; they brought me fish and vegetables and other things. In the evenings I went to the big hotels filled with the millionaire tourists, to cure them of their sunburn. Every day I had between twenty and forty tourists to cure. G5 gets rid of the pain of sunburn within five minutes and within an hour cures the sunburn itself. I also taught the barmen in the hotel bars how to use G5, so every evening the barmen applied poultices to the tourists."

During his time in Antigua, Le Ribault pursued an embittered relationship with his homeland. When he received regulatory agreement to produce and use G5 on Antigua, he made sure that the French press raised awkward questions about the situation in France.

But Le Ribault's strategy of embarrassment was to cost him dearly. Two days after the issue was raised in the French newspapers, the French police raided the home of his eighty-five-year-old mother and questioned her for five hours. His mother, who had

been fit and healthy before the interrogation, fell ill that evening. She never recovered her health, and she died two weeks later.

The police told Ribault's mother that there was now a warrant out for Le Ribault's arrest and that they were searching for documents not only about G5 but also about Ribault's forensic laboratory CARME. Le Ribault thinks now that his trouble began to develop over G5 when the police had become concerned about the possible leaking of information about sensitive police cases.

Stranded in the Caribbean, Le Ribault was deeply saddened by the

death of his mother and angered by what appeared to be a gratuitous police strategy. He had not hidden himself in Antigua; the judge who was dealing with the complaint against him had his fax and phone numbers and address.

"The police knew that my mother was very old and tired. When she died, I suppose they reckoned that I would turn up at the funeral and they would be able to arrest me."

ARREST AND IMPRISONMENT IN FRANCE

In November 1997, Le Ribault felt obliged to go back to France to recover the personal and work documents which he needed to continue work in Antigua. Knowing there was a warrant out for his arrest, he decided to return covertly.

"It was my intention to show the Antiguan agreement to people in France in the hope that I could get a similar one there. I visited doctors and a number of other sympathisers who I thought could push my case forward."

Although Le Ribault was "underground" in France, two of his friends suggested that he give a lecture about G5 to a select audience. Unbeknown to him, however, his friends had contacted the police and told them where the seminar was being held, with the intention of creating media interest in his case and G5. To set Le Ribault's mind at ease, his friends told him that if the police did appear he would be whisked away, leaving sympathetic attending journalists to report the crisis.

Either by conspiracy or criminal opportunism, companies suddenly began to spring up claiming to be using organic silica for health therapies.

In the event, Le Ribault was whisked away—not by his friends but by a jubilant police posse.

And so, by accident, the most frightening part of Le Ribault's journey began.

"I was sent immediately to jail. I was taken first to the Bordeaux station of the Regional Crime Squad, from where the police called the judge dealing with my case. They said to him, 'Victory! We have caught Le Ribault!'"

The judge declined to hear Le Ribault's case that day and so Ribault was taken to Gradignan prison.

The next day, Le Ribault was taken before the judge for a 10-minute hearing. Despite the fact that the only complaint against him was, he thought, a civil complaint from the Order of Doctors and the Order of Pharmacists, the judge ordered that Le Ribault be kept in prison. In answer to his lawyer's protests that in prison his client would be in danger from men whom he had helped convict, the judge ruled that Le Ribault be kept in solitary confinement.

What worried Le Ribault as he was taken back to the jail was the fact that no time limit had been put on his imprisonment. The judge, who was clearly "building a case", had said only that with Christmas coming up his schedule would be full and he would not be able to hear the case. Le Ribault was also concerned that the judge who had been selected to hear his case had been one of the main customers for his forensic services when he worked for the police—a judge known throughout Bordeaux, according to Le Ribault, to be "a crazy judge; very strange, very dangerous".

Early on the day of his arrest, Le Ribault had had five teeth extracted. Now, as he entered solitary confinement, he was not only uncomfortable and isolated but also unable to eat. In the depths of winter, with snow falling outside and no heating inside, Le Ribault served his solitary confinement in a cell which had next to no glass in the windows. Two fingers on one hand and both his feet became frozen, and consequently he now has trouble walking any distance. "The cold was the worst problem, even greater than not knowing when I would be released."

The deprivations which Le Ribault suffered in a contemporary French prison sound echoes of Solzynitsin. As with many prisons, the old systems had fallen into disuse or been adapted by the screws. Every cell had a bell in case of emergency, but the guards had switched them off because of the continuous noise.

To get help, prisoners had to push a piece of paper between the door and the doorjamb which could be seen in the corridor. This, Le Ribault says, was "alright as long as the officers liked you; if they didn't, you could wait a thousand hours". The judge allowed Le Ribault visits from only two working colleagues, specifically excluding his partner.

RELEASE AND ESCAPE FROM FRANCE

At his second and last hearing before the magistrate, Le Ribault discovered that more complaints had accumulated in his file. The charges had grown from two civil complaints to include nine criminal charges, such as the selling of a toxic substance, illegal

experimentation in biology and advertising a medicine in the press. Le Ribault did not consider himself guilty of any of these further charges.

Of the charge that he was not a doctor, Le Ribault could say only that his qualification, that of Doctor of Science, is the highest awarded by a university in France. He also made the point that any biologist and similar natural scientist who wished to emulate Pasteur, himself not a doctor, stood a good chance of being thrown in prison in modern France.

Following Le Ribault's arrest, the authorities made a number of statements relating to G5; one, very much in his favour, was an assurance that the substance was completely non-toxic.

Desperate to get Le Ribault out of this nightmare backwater, his lawyer made an application to the High Court for his release.

"I was released by the High Court, but the judges reserved their opinion and gave it two days after the hearing, which meant that I was an extra three days in prison—three days in which I did not know whether I would be released," says Le Ribault.

The court imposed strict conditions on his bail upon his release; he had to surrender his passport and report to the police station twice a week.

Released from prison, Le Ribault stayed first with a friend; but two months after he'd settled there he received a phone call from a police friend, informing him that police officers were on their way to arrest him. Five minutes later, with Le Ribault watching from the garden, six police officers raided his friend's house.

He went next to stay with another friend, but the next day Le Ribault noticed police cars observing the address. This time, he decided to make his way to Belgium.

"It took me one month to get to the Belgian border, where I was hidden in a police station by a friend who was an officer of the *gendarmérie*. The policeman drove me over the Belgian frontier, using his police papers. From there I

rang Belgium friends and spent four months in an isolated house in the middle of the Ardennes forest."

From Belgium, Le Ribault went secretly to England and from there to Jersey. He was now very aware of his position as a man without a home or a public identity. Although he does not mention it, he must frequently weigh up his situation in light of his early brilliant career.

"My friends have helped me because I have absolutely nothing. I have no money, no relatives. I am an illegal person, a stateless alien."

AN INCREASINGLY COMMON DRAMA

Dr Loïc Le Ribault's story reads in part like a Walt Disney film in which the boffin-like scientist, after some hocus-pocus in the laboratory, discovers a "cure-all elixir" and is then hounded, chemical flask in hand, by men in black hats.

From another perspective, however, his story reads in shades of the darkest *noir*, a synthesis of classic contemporary dramas in

The scientist, medical scientist or doctor, forced to work beyond the orthodoxy and subjected to powerful manipulation, ridicule, sabotage and/or criminalisation, is becoming an increasingly common figure in contemporary drama as well as in real life.

Continued on page 74

Something to fill some space if you have room.
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ORGAN TRANSPLANTS AND CELLULAR MEMORIES

If you wish to upset the law that all crows are black...it is enough if you prove one single crow to be white.

— William James, MD

According to this study of patients who have received transplanted organs, particularly hearts, it is not uncommon for memories, behaviours, preferences and habits associated with the donor to be transferred to the recipient.

by
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INTRODUCTION

It is generally assumed that learning involves primarily the nervous system and secondarily the immune system. Hence, patients receiving peripheral organ transplants should not experience personality changes that parallel the personalities of donors they have never met. When personality changes have been observed following transplants, the kinds of explanations entertained include effects of the immunosuppressant drugs, psychosocial stress, and pre-existing psychopathology of the recipients.¹⁻³

However, living systems theory explicitly posits that all living cells possess "memory" and "decider" functional subsystems within them.⁴ Moreover, the recent integration of systems theory with the concept of energy (termed dynamical energy systems theory) provides compelling logic that leads to the prediction that all dynamical systems store information and energy to various degrees.⁵⁻⁷ The systemic memory mechanism provides a plausible explanation for the evolution of emergent (novel) systemic properties through recurrent feedback interactions (i.e., the nonlinear circulation of information and energy that reflects the ongoing interactions of the components in a complex, dynamic network).

Recurrent feedback loops exist in all atomic, molecular and cellular systems. Hence, evidence for atomic systemic memory, molecular systemic memory and cellular systemic memory should be found in these systems.

The systemic memory mechanism has been applied to a variety of controversial and seemingly anomalous observations in complementary and alternative medicine, including homoeopathy.⁸ It also makes new predictions. One prediction is that sensitive recipients of transplanted organs can experience aspects of the donor's personal history stored in the transplanted tissues.

In 1997, a book titled *A Change of Heart* was published that described the apparent personality changes experienced by Claire Sylvia.⁹ Sylvia received a heart and lung transplant at Yale–New Haven Hospital in 1988. She reported noticing that various attitudes, habits and tastes changed following her surgery. She had inexplicable cravings for foods she had previously disliked. For example, though she was a health-conscious dancer and choreographer, upon leaving the hospital she had an uncontrollable urge to go to a Kentucky Fried Chicken outlet and order chicken nuggets, a food she never ate. Sylvia found herself drawn toward cool colours and no longer dressed in the bright reds and oranges she used to prefer. She began behaving in an aggressive and impetuous manner that was uncharacteristic of her but turned out to be similar to the personality of her donor. Interestingly, uneaten Kentucky Fried Chicken nuggets were found in the jacket of the young man (her donor) when he was killed.

Opinions about the plausibility of cellular memory were sought by William Novak, the co-author of the book. Pearsall proposed that the immunosuppressant drugs could conceivably lower the threshold for patients to potentially register cellular memories stored in the transplanted organs (cited in 9, extended in 10). Schwartz and Russek proposed that the rejection process might not only reflect the rejection of the material comprising the cells but also the systemic information and energy stored within the cells as well (cited in 9, extended in 7, 8).

Sylvia was unique because she received a substantial amount of new tissue (heart and lungs), she was health conscious and she was emotionally open and sensitive. Schwartz and Russek proposed that Claire Sylvia might be the "white crow" of cellular systemic memory.⁷

This paper reports key observations from 10 representative cases of transplant recipients who were open to sharing experiences of personal changes following their operations that are consistent with the systemic memory prediction.

To protect the privacy of the donors' families, recipients and their families, physicians and hospitals, donors and recipients are referred to by number, except when their first names were mentioned by family members or friends in the transcripts. All recipients and family members or friends of the donors were interviewed by Pearsall and audiotaped. The transcripts were examined by Schwartz and Russek and selected for inclusion in this report.

Each of the 10 cases includes a donor family member's report (or equivalent), a recipient's report (or equivalent) and a recipient family member's or friend's report. Donor family members, recipients and recipient family members or friends are quoted directly from the transcripts. Personal opinions (including controversial content) are reported verbatim. Each case includes two to five sample parallels between the donors and changes observed in the recipients post transplant surgery.

Case 1

The donor was an 18-year-old boy killed in an automobile accident. The recipient was an 18-year-old girl diagnosed with endocarditis and subsequent heart failure.

The donor's father, a psychiatrist, said:

"My son always wrote poetry. We had waited more than a year to clean out his room after he died. We found a book of poems he had never shown us, and we've never told anyone about them. One of them has left us shaken emotionally and spiritually. It spoke of his seeing his own sudden death. He was a musician, too, and we found a song he titled "Danny, My Heart Is Yours"—the words about how my son felt he was destined to die and give his heart to someone. He had decided to donate his organs when he was 12 years old. We thought it was quite strong, but we thought they were talking about it in school. When we met his recipient, we were so...we didn't know, like, what it was. We don't know now. We just don't know."

The recipient reported:

"When they showed me pictures of their son, I knew him directly. I would have picked him out anywhere. He's in me. I know he is in me and he is in love with me. He was always my lover, maybe in another time somewhere. How could he know years before he died that he would die and give his heart to me? How would he know my name is Danny? And then, when they played me some of his music, I could finish the phrases of his songs. I could never play before, but after my transplant I began to love music. I felt it in my heart. My heart had to play it. I told

my mom I wanted to take guitar lessons—the same instrument Paul [the donor] had played. His song is in me. I feel it a lot at night and it's like Paul is serenading me."

The recipient's father reported:

"My daughter, she was what you say....a hell-raiser. Until she got sick—they say from a dentist, they think—she was the wild one. Then she became quite quiet. I think it was her illness, but she said she felt more energy, not less. She said she wanted to play an instrument and she wanted to sing. When she wrote her first song, she sang about her new heart as her lover's heart. She said her lover had come to save her life."

Case 2

The donor was a 16-month-old boy who drowned in a bathtub. The recipient was a seven-month-old boy diagnosed with tetralogy of Fallot (a hole in the ventricular septum with displacement of the aorta, pulmonary stenosis and thickening of the right ventricle).

The donor's mother, a physician, noted:

"The first thing is that I could more than hear Jerry's [donor's] heart. I could feel it in me. When Carter [the recipient] first saw me, he ran to me and pushed his nose against me and rubbed and rubbed it. It was just exactly what we did with Jerry. Jerry and Carter's heart is five years old now, but Carter's eyes were Jerry's eyes. When he hugged me, I could feel my son. I mean I could feel him, not just symbolically. He was there. I felt his energy.

"I'm a doctor. I'm trained to be a keen observer and have always been a natural-born sceptic. But this was real. I know people will say that I need to believe my son's spirit is alive, and perhaps I do. But I felt it. My husband and my father felt it. And I swear to you, and you can ask my mother, Carter said the same baby-talk words that Jerry said. Carter is six, but he was talking Jerry's baby talk and playing with my nose just like Jerry did.

"We stayed with the ... [recipient family] that night. In the middle of the night, Carter came in and asked to sleep with my husband and me. He cuddled up between us exactly like Jerry did, and we began to cry. Carter told us not to cry because Jerry said everything was okay. My husband and I, our parents and those who really knew Jerry have no doubt. Our son's heart contains much of our son and beats in Carter's chest. On some level, our son is still alive."

The recipient's mother reported:

"I saw Carter go to her [donor's mother]. He never does that. He is very, very shy, but he went to her just like he used to run to me when he was a baby. When he whispered 'It's okay, mama', I broke down. He called her 'Mother', or maybe it was Jerry's heart talking. And one more thing that got to us. We found out talking to Jerry's mom that Jerry had mild cerebral palsy mostly on his left side. Carter has stiffness and some shaking on that same side. He never did as a baby and it only showed up after the transplant. The doctors say it's probably something to do with his medical condition, but I really think there's more to it.

"And then, when they played me some of his music, I could finish the phrases of his songs. I could never play before, but after my transplant I began to love music. I felt it in my heart."

"One more thing I'd like to know about. When we went to church together, Carter had never met Jerry's father. We came late and Jerry's dad was sitting with a group of people in the middle of the congregation. Carter let go of my hand and ran right to that man. He climbed on his lap, hugged him and said 'Daddy'. We were flabbergasted. How could he have known him? Why did he call him dad? He never did things like that. He would never let go of my hand in church and never run to a stranger. When I asked him why he did it, he said he didn't. He said Jerry did and he went with him."

Case 3

The donor was a 24-year-old woman who was the victim of an automobile accident. The recipient was a 25-year-old male graduate student suffering from cystic fibrosis who received a heart-lung transplant.

The donor's sister reported:

"My sister was a very sensual person. Her one love was painting. She was on her way to her first solo showing at a tiny art shop when a drunk ploughed into her. It's a lesbian art store that supports gay artists. My sister was not really very 'out' about it, but she was gay. She said her landscape paintings were really representations of the mother or woman figure. She would look at a naked woman model and paint a landscape from that! Can you imagine? She was gifted."

The recipient reported:

"I never told anyone at first, but I thought having a woman's heart would make me gay. Since my surgery, I've been hornier than ever and women just seem to look even more erotic and sensual, so I thought I might have gotten internal transsexual surgery. My doctor told me it was just my new energy and lease on life that made me feel that way, but I'm different. I know I'm different. I make love like I know exactly how the woman's body feels and responds—almost as if it is my body. I have the same body, but I still think I've got a woman's way of thinking about sex now."

The recipient's girlfriend said:

"He's a much better lover now. Of course, he was weaker before, but it's not that. He's like, I mean, he just knows my body as well as I do. He wants to cuddle, hold and take a lot of time. Before he was a good lover, but not like this. It's just different. He wants to hug all the time and go shopping. My God, he never wanted to shop! And you know what, he carries a purse now. His purse! He slings it over his shoulder and calls it his bag, but it's a purse. He hates it when I say that, but going to the mall with him is like going with one of the girls. And one more thing, he loves to go to museums. He would never, absolutely never, do that. Now he would go every week. Sometimes he stands for minutes and looks at a painting without talking. He loves landscapes and just stares. Sometimes I just leave him there and come back later."

Case 4

The donor was a 17-year-old black male student victim of a drive-by shooting. The recipient was a 47-year-old white male foundry worker diagnosed with aortic stenosis.

The donor's mother reported:

"Our son was walking to violin class when he was hit. Nobody knows where the bullet came from, but it just hit him and he fell. He died right there on the street, hugging his violin case. He loved music and his teachers said he had a real thing for it. He would listen to music and play along with it. I think he would have been at Carnegie Hall some day, but the other kids always made fun of the music he liked."

The recipient reported:

"I'm real sad and all for the guy who died and gave me his heart, but I really have trouble with the fact that he was black. I'm not a racist, mind you, not at all. Most of [my] friends at the plant are black guys. But the idea that there is a black heart in a white body seems really...well, I don't know. I told my wife that I thought my penis might grow to a black man's size. They say black men have larger penises, but I don't know for sure. After we have sex, I sometimes feel guilty because a black man made love to my wife, but I don't really think that seriously."

"I can tell you one thing, though. I used to hate classical music, but now I love it. So I know it's not my new heart, because a black guy from the 'hood wouldn't be into that. Now it calms my heart. I play it all the time. I more than like it. I didn't tell any of the guys on the line that I have a black heart, but I think about it a lot."

The recipient's wife reported:

"He was more than concerned about the idea when he heard it was a black man's heart. He actually asked me if he could ask the doctor for a white heart when one came up. He's no Archie Bunker, but he's close to it. And he would kill me if he knew I told you this, but for the first time he's invited his black friends over from work. It's like he doesn't see their colour any more, even though he still talks about it sometimes. He seems more comfortable and at ease with these black guys, but he's not aware of

"He wants to hug all the time and go shopping. My God, he never wanted to shop! And you know what, he carries a purse now. His purse!"

it.

"And one more thing I should say. He's driving me nuts with the classical music. He doesn't know the name of one song and never, never listened to it before. Now, he sits for hours and listens to it. He even whistles classical music songs that he could never know. How does he know them? You'd think he'd like rap music or something because of his black heart."

Case 5

The donor was a 19-year-old woman killed in an automobile accident. The recipient was a 29-year-old woman diagnosed with cardiomyopathy secondary to endocarditis.

The donor's mother reported:

"My Sara was the most loving girl. She owned and operated her own health food restaurant and scolded me constantly about not being a vegetarian. She was a great kid. Wild, but great. She was into the free-love thing and had a different man in her life every few months. She was man crazy when she was a little girl and it never stopped. She was able to write some notes to me when she was dying. She was so out of it, but she kept saying how she could feel the impact of the car hitting them. She said she could feel it going through her body."

The recipient reported:

"You can tell people about this if you want to, but it will make you sound crazy. When I got my new heart, two things happened

to me. First, almost every night, and still sometimes now, I actually feel the accident my donor had. I can feel the impact in my chest. It slams into me, but my doctor said everything looks fine. Also, I hate meat now. I can't stand it. I was McDonald's biggest money-maker, and now meat makes me throw up. Actually, when I even smell it, my heart starts to race. But that's not the big deal. My doctor said that's just due to my medicines.

"I couldn't tell him, but what really bothers me is that I'm engaged to be married now. He's a great guy and we love each other. The sex is terrific. The problem is, I'm gay. At least, I thought I was. After my transplant, I'm not...I don't think, anyway...I'm sort of semi- or confused gay. Women still seem attractive to me, but my boyfriend turns me on; women don't. I have absolutely no desire to be with a woman. I think I got a gender transplant."

The recipient's brother reported:

"Susie's straight now. I mean it seriously. She was gay and now her new heart made her straight. She threw out all her books and stuff about gay politics and never talks about it any more. She was really militant about it before. She holds hands and cuddles with Steven just like my girlfriend does with me. She talks girl-talk with my girlfriend, where before she would be lecturing about the evils of sexist men. And my sister, the queen of the Big Mac, hates meat. She won't even have it in the house."

Case 6

The donor was a 14-year-old girl injured in a gymnastics accident. The recipient was a 47-year-old man diagnosed with benign myxoma and cardiomyopathy.

The donor's mother reported:

"Look at her [shows photograph]. My daughter was the picture of health. There wasn't an ounce of fat on her. She was a gymnast and her coach could lift her above his head with one hand. She was so excited about life that she would just hop and jump all the time like a kitten. She had some trouble with food, though. She would skip meals, and for a while she was purging. I think they would call her a little anorexic. We took her to therapy about it, but she just wasn't much into food. And she had this silly little giggle when she got embarrassed. It sounded like a little bird."

The recipient reported:

"I feel new again. I feel like a teenager. I actually feel giddy. I know it's just the energy of the new heart, but I really feel younger in every way, not just physically. I see the world that way. I'm really young at heart. I have this annoying tendency to giggle that drives my wife nuts. And there's something about food. I don't know what it is. I get hungry, but after I eat I often feel nauseated and that it would help if I could throw up."

The recipient's brother reported:

"Gus is a teenager. No doubt about that. He's a kid or at least he thinks he's a kid. Even when we're bowling, he yells and jumps around like a fool. He's got this weird laugh now. It's a girl's laugh and we tell him that. He doesn't care. His appetite never did bounce back after the surgery. He's pretty much nauseated almost all the time. After Thanksgiving dinner—and he loved it—he went upstairs and vomited. We took him to the emergency room, but it wasn't anything to do with his new heart. They said it was probably a reaction to something in the meal.

None of the rest of the family got sick, though. He's going to have to watch it. His doctor is concerned about his weight."

Case 7

The donor was a three-year-old girl who drowned in the family pool. The recipient was a nine-year-old boy diagnosed with myocarditis and septal defect.

The recipient's mother said:

"He [the recipient] doesn't know who his donor was or how she died. We do. She drowned at her mother's boyfriend's house. Her mother and her boyfriend left her with a teenage babysitter who was on the phone when it happened. I never met her father, but the mother said they had a very ugly divorce and that the father never saw his daughter. She said she worked a lot of hours and wished she had spent more time with her. I think she feels pretty guilty about it all...you know, the both of them sort of not appreciating their daughter until it was too late."

The recipient, who claimed not to know who the donor was, reported:

"I talk to her sometimes. I can feel her in there. She seems very sad. She is very afraid. I tell her it's okay, but she is very afraid. She says she wishes that parents wouldn't throw away their children. I don't know why she would say that."

The recipient's mother said about the recipient:

"Well, the one thing I notice most is that Jimmy is now deathly afraid of the water. He loved it before. We live on a lake and he won't go out in the backyard. He keeps closing and locking the back door. He says he's afraid of the water and doesn't know why. He won't talk about it."

**"Also, I hate meat now.
I can't stand it.
I was McDonald's biggest
money-maker, and now meat
makes me throw up."**

Case 8

The donor was a 19-year-old woman who had suffered a broken neck in dance class. The recipient was a 19-year-old woman diagnosed with cardiomyopathy.

The donor's mother reported:

"We've met Angela [the recipient], and she is the image of our daughter [Stacy]. They could almost be twins. They're both bright girls; I mean, my daughter was bright, too. She wanted to be an actress, but we thought she had too much academic potential for that. Her father is a doctor and really wanted her to follow in his footsteps."

The donor's father reported:

"Stacy was extremely bright. It's so tragic. She would have made an outstanding physician, but she wanted to dance and sing. That's how she died. She fell in dance class. We always argued good-naturedly about how disappointed I would be if she went to Hollywood instead of Harvard. I hope she knew I just wanted her to be happy."

The recipient reported:

"I think of her as my sister. I think we must have been sisters in a former life. I only know my donor was a girl my age, but it's more than that. I talk to her at night or when I'm sad. I feel her answering me. I can feel it in my chest. I put my left hand there and press it with my right. It's like I can connect with her. Sometimes she seems sad. I think she wanted to be a nurse or something, but other times it's like she wanted to be on Broadway.

I think she wanted to be on Broadway more. I want to be a nurse, but I could be a doctor too. I hope she will be happy, because she will always be my angel, my sister in my chest. I carry my angel with me everywhere."

The recipient's mother reported:

"We can sometimes hear her talking to her heart. It's like a 'Dear diary' thing. She puts her hand on her chest and talks to who she thinks her donor is. Once we found her holding a stethoscope to her chest to try to hear her new heart. I think she still does that sometimes. And the only other thing is that she really wants to go to medical school now. She never wanted to do that before, but that's because I don't think she thought she would live. She's already changed her college classes."

Case 9

The donor was a three-year-old boy who fell from an apartment window. The recipient was a five-year-old boy with septal defect and cardiomyopathy.

The donor's mother reported:

"It was uncanny. When I met the family and Daryl [the recipient] at the transplant meeting, I broke into tears. Then we went up to the giving tree where you hand a token symbolising your donor. I was already crying when my husband told me to look at the table we were passing. It was the donor family with Daryl sitting there. I knew it right away. Daryl smiled at me exactly like Timmy [the donor] did. After we talked for hours with Daryl's parents, we were comforted. It somehow just didn't seem strange at all after a while. When we heard that Daryl had made up the name Timmy and got his age right, we began to cry. But they were tears of relief because we knew that Timmy's spirit was alive."

The recipient reported:

"I gave the boy a name. He's younger than me and I call him 'Timmy'. He's just a little kid. He's a little brother like about half my age. He got hurt bad when he fell down. He likes Power Rangers a lot, I think, just like I used to. I don't like them anymore, though. I like Tim Allen on Tool Time, so I called him Tim. I wonder where my old heart went, too. I sort of miss it. It was broken, but it took care of me for a while."

The recipient's father reported:

"Daryl never knew the name of his donor or his age. We didn't know either until recently. We just learned that the boy who died had fallen from a window. We didn't even know his age until now. Daryl had it about right. Probably just a lucky guess or something, but he got it right. What is spooky, though, is that he not only got the age right and some idea of how he died, he got the name right. The boy's name was Thomas, but for some reason his immediate family called him 'Tim'."

The recipient's mother reported:

"Are you going to tell him the real twilight zone thing? Timmy fell trying to reach a Power Ranger toy that had fallen on the ledge of the window. Daryl won't even touch his Power Rangers any more..."

Case 10

The donor was a 34-year-old police officer shot attempting to arrest a drug dealer. The recipient was a 56-year-old college professor diagnosed with atherosclerosis and ischaemic heart disease.

The donor's wife reported:

"When I met Ben [the recipient] and Casey [Ben's wife], I almost collapsed. First, it was a remarkable feeling seeing the man with my husband's heart in his chest. I think I could almost see Carl [the donor] in Ben's eyes. When I asked how Ben felt, I think I was really trying to ask Carl how he was. I wouldn't say that to them, but I wish I could have touched Ben's chest and talked to my husband's heart.

"What really bothers me, though, is when Casey said offhandedly that the only real side-effect of Ben's surgery was flashes of light in his face. That's exactly how Carl died. The bastard shot him right in the face. The last thing he must have seen is a terrible flash. They never caught the guy, but they think they know who it is. I've seen the drawing of his face. The guy has long hair, deep eyes, a beard, and this real calm look. He looks sort of like some of the pictures of Jesus."

The recipient reported:

"If you promise you won't tell anyone my name, I'll tell you what I've not told any of my doctors. Only my wife knows. I only knew that my donor was a 34-year-old very healthy guy. A few weeks after I got my heart, I began to have dreams. I would see a flash of light right in my face and my face gets real, real hot. It actually burns. Just before that time, I would get a glimpse of Jesus. I've had these dreams and now daydreams ever since: Jesus and then a flash. That's the only thing I can say is something different, other than feeling really good for the first time in my life."

The recipient's wife reported:

"I'm very, very glad you asked him about his transplant. He is more bothered than he'll tell you about these flashes. He says he sees Jesus and then a blind flash. He told the doctors about the flashes but not Jesus. They said it's probably a side effect of the medications, but God we wish they would stop."

**Historically,
transplant recipients
have been reluctant to
share such experiences
with their physicians
(and in many cases,
even with their
families and
friends).**

DISCUSSION

The cases reported here are representative of more than 74 transplant patients, 23 of whom were heart transplant recipients, that were brought to Pearsall's attention over the past 10 years.¹⁰

Since the cases were collected sporadically and clinically, it is not possible to calculate the percentage of patients who reported degrees of personality changes that did or did not parallel the donors to various degrees. The present report provides theoretical and empirical justification for conducting a controlled comprehensive study.

Historically, transplant recipients have been reluctant to share such experiences with their physicians (and in many cases, even with their families and friends). Moreover, the prevailing belief that memories are stored primarily in the nervous system (and secondarily in the immune system) would decrease the likelihood

that transplant recipients would be open to receiving cellular memories from the transplanted organs in the first place. The same belief would decrease the likelihood that family members and friends, as well as surgeons and health care providers in general, would be open to hearing from transplant recipients about cellular memories. Hence, it is not possible to determine what the actual percentage is of personality changes; underreporting appears to be the rule rather than the exception.

Case 4 illustrates this point expressly. When a 47-year-old white male foundry worker received the heart of a 17-year-old black male student, he presumed that the black youth would prefer "rap" music. Hence, he dismissed the idea that his new radical change in preference for classical music could have come from the heart of the donor. However, unbeknownst to the recipient, the donor actually loved classical music, and died "hugging his violin case" on the way to his violin class.

Since completing this paper, Schwartz and Russek interviewed a patient of Dr Copeland who received a heart transplant and experienced a large set of personality changes. He received a woman's heart, and his many personality changes include a passion for the colour pink (a colour he disliked prior to surgery), and a preference for perfumes (which prior to his surgery he could not tolerate and would not allow his wife to wear). He currently bathes in and wears feminine fragrances.

His daughters tease him, and he is afraid to share these experiences with his doctors. He shared them with Schwartz and Russek because he learned they were open to these changes and would help him discover if they were related to the donor (efforts are currently underway to contact the donor's family). His case is interesting because he was pronounced dead twice and revived prior to his transplant. He had a near-death experience that, according to the patient and his wife, transformed him and led him to be more open.

Recipients may vary in their openness to receiving cellular information as well as in their clarity in experiencing and reporting changes. One reviewer of the manuscript asked: "Do recipients have any control over this? If all recipients were open to it, would they all receive?" This is an important question, one that can be addressed in future research. Theoretically, more individuals should be able to retrieve information if they are encouraged to be open and receive the information. Hypnosis could be considered as a possible clinical research tool.

The cases reported here are unusual (but not unique) in that clear changes were observed by recipients that were subsequently verified by recipient family members or friends. Moreover, in each case, information about the donors was specifically verified from donor family members or friends. In each case, personal changes in the recipients preceded any contact with donor family members or friends.

The recipients reported here would not receive psychiatric diagnoses. They were not suffering from extreme depression or anxiety, though some reported anxiety about their experiences. Case

10 illustrates this expressly. A 56-year-old college professor recipient experienced dreams not only of white flashes in his face but just before the flash he sometimes "would get a glimpse of Jesus". Fearful of this potential hallucination and its possible diagnostic significance, he did not share this information with his doctors (though he did tell them about the flashes). The donor was a 34-year-old police officer who was shot in the face while attempting to arrest a drug dealer. According to the donor's wife: "They never caught the guy, but they think they know who it is. I've seen the drawing of his face. The guy has long hair, deep eyes, a beard, and this real calm look. He looks sort of like some of the pictures of Jesus."

Can such reports be explained by statistical coincidence? The parallels in names reported in cases 1, 8 and 9 could potentially be explained as coincidences. In case 9, for example, the young recipient's choice of the name Tim (for the donor he never met) may have been related to his personal preference.

The recipient stated: "I like Tim Allen on Tool Time, so I called him Tim." However, the statistical coincidence explanation is strained by the observation of this recipient's perception: "He [the donor] likes Power Rangers a lot, I think, just like I used to. I don't like them any more, though." The donor purportedly died "trying to reach a Power Ranger toy that had fallen on the ledge of the window". The findings spanning the 10 cases appear too coincidental to be accidental (the statistical coincidence hypothesis).

Future research is necessary to investigate the recipient-donor coincidence phenomenon systematically. Research is underway at the University of Arizona on a sample of over 300 transplant patients to estimate the incidence of such coincidences using semi-structured interviews and systematic questions.

In addition, a subset of the transplant patients is being monitored physiologically to examine biophysical measures of heart-brain synchrony.¹¹

The research is testing predictions derived from dynamical energy systems theory applied to the heart. Termed "energy cardiology", the basic hypothesis is that information and energy are transmitted electromagnetically between the brain and heart, and that through electromagnetic resonance the brain may process information derived from the donor's heart.¹² Other forms of energetic communication are also plausible and should be considered in future research.¹³

Pearsall has informally observed that in addition to heart recipients, kidney, liver and other organ recipients also indicated changes in sense of smell, food preference and emotional factors. However, they were usually transitory and could be associated with medications and other factors of transplantation.¹⁰

The findings for heart transplants appear more robust and were more strongly associated with the donor's history. If this observation is verified in future research, the implications for basic physiology as well as clinical medicine could be substantial.

The cases reported here are unusual (but not unique) in that clear changes were observed by recipients that were subsequently verified by recipient family members or friends.

Continued on page 76

DRUGS AND CHEMICALS STRAIGHT FROM THE TAP

Evidence is mounting that many of the poisons that are polluting our waterways, our water supplies and our bodies are sourced from pharmaceutical drugs and personal care products.

by Sherrill Sellman, ND © 2005

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PHARMACEUTICAL AND PERSONAL CARE POLLUTANTS (PPCPs)

Have you ever wondered what happens to the hundreds of millions of prescription drugs and over-the-counter medications that are swallowed daily throughout the world? Probably not! So, here's something to ponder as you're sipping your morning coffee or relaxing in your spa bath.

Up to 90 per cent of every drug that a person takes into their body is either excreted from the body totally unchanged or is broken down into an active metabolite before being flushed down the toilet and into the sewerage system, ultimately finding its way into the water supply. But there's one more step to this chain of events: this chemical potpourri eventually returns to us every time we turn on the kitchen faucet.

In addition to pharmaceutical drugs, there's another group of chemicals sneaking into the water supply. More than 10,500 chemical ingredients are used to manufacture what is collectively known as personal care products. These are products that most of us can't imagine living without: the moisturisers, cleansers, bubble baths, shampoos, fragrances, deodorants, mouth-washes, sunscreens, etc. It is now proven that vast numbers of these chemicals interfere with our endocrine, neurological, respiratory and immune systems.

This collection of chemical compounds is now officially known as Pharmaceutical and Personal Care Pollutants (PPCPs), a label which refers in general to any product consumed by individuals for personal health or cosmetic reasons. PPCPs comprise a broad, diverse array of thousands of chemical substances, including prescription and over-the-counter therapeutic drugs, fragrances, cosmetics, sunscreen agents, diagnostic agents, nutraceuticals, biopharmaceuticals and many others. Until recently, little if any thought had been given to the consequences from the staggering quantities of chemicals that are washed down the sink, flushed as human waste down the toilet or rinsed from our bodies into drains.

According to Dr Christian G. Daughton, EPA scientist and a leading researcher in the PPCP field, "the amount of pharmaceuticals and personal care products entering the environment annually is about equal to the amount of pesticides used each year"!

Many pharmaceutical and personal care products have persistent chemicals and compounds that remain biologically active even when they are disposed of in landfills and water systems. Hospitals, doctors' offices, veterinary clinics, farms, ranches and even the average home are major contributors to the PPCP overload. Other sources include unused medications, which are commonly flushed down the toilet, leaks from failing septic systems and discharges from wastewater treatment plants. It's indeed a most sobering thought to realise that our personal grooming habits as well as our reliance on pharmaceutical drugs may, however unwittingly, be contributing to a global PPCP problem.

It is reasonable to surmise that the occurrence of PPCPs in water supplies is not a new phenomenon; it's just that it remained unrecognised for decades. Current knowledge about PPCPs is due to remarkable advances in science that have enabled the detection of compounds in water at infinitesimal concentrations. These advances have finally piqued interest in the extent of the presence and persistence of PPCPs in water, as well as their effects on aquatic organisms and, most importantly, their possible effects on human health. The fact is, no one really knows how these chemical mixtures might be altering our health. But there are plenty of clues. Many chemicals are designed to profoundly affect human physiology. Dr Daughton warns that it wouldn't be surprising if they affected fish, birds, frogs and insects as well. However, unlike pesticides, these drugs—as well as shampoos, sunscreens and other personal care products—are not examined for their effect on the environment before they're placed on the market.

"This is surprising," Daughton says, "especially since certain pharmaceuticals are designed to modulate endocrine and immune systems." Hence, they have "obvious potential as endocrine disruptors in the environment".²

Even though it is now recognised that PPCPs have permeated sensitive ecosystems, very little research has ever been conducted on their potential effects. No municipal sewage treatment plants are engineered for PPCP removal. The risks posed to aquatic organisms (by continual life-long exposure) and to humans (by long-term consumption of minute quantities in drinking and bathing water) are essentially unknown.

While the major concerns to date have been with the promotion of pathogen resistance to antibiotics and the disruption of endocrine systems by natural and synthetic sex steroids, the consequences of many other PPCPs are unknown.

RECENT RESEARCH INTO THE PPCP PROBLEM

Many government officials are uneasy discussing these dangers, and so are the water utilities. In the USA, this is a new, emerging, environmental problem. Little is being done to limit drugs entering the water supply, and scientists are baffled not only by the scope of the problem and lack of effective water testing and purification systems but also by the paucity of research.

However, in Europe the response has been quite different. In the 1980s, the issue of PPCPs emerged as a serious area of investigation. A study in Germany, which has been at the forefront of this research, found PPCPs in treated and untreated sewage effluent, surface water, ground water and drinking water. Most commonly found were anti-inflammatory and pain-killing drugs, cholesterol-lowering drugs, anti-convulsants and hormones from oral contraceptives. Samples from 40 German rivers and streams turned up residues of 31 different PPCPs.³

A study by Thomas Heberer and Hans-Jurgen Stan of the Technical University in Berlin found significant amounts of antibiotics, ibuprofen, cholesterol-lowering drugs, hormones (oestrogen) and chemotherapy agents in Berlin's water supply, while Swiss researcher Hans-Rudolf Buser of the Swiss Federal Research Station in Wädenswil found cholesterol-lowering drugs in Swiss lakes. British scientists have estimated that more than a tonne of aspirin and a tonne of morphine derivatives flow down just one small river in northeast London every year.⁴

According to Bent Halling-Sorensen, professor of analytical chemistry at the Royal Danish School for Pharmaceuticals: "Between 30 and 90 per cent of an administered dose of most antibiotics to humans and animals is excreted with the urine." The problem is particularly acute in the fish-farming industry, where 70 to 80 per cent of drugs administered end up in the environment.⁵

The PPCP problem gained prominence in the United States in 2002, when results from the US Geological Survey's (USGS) sampling of 139 streams showed detectable, although minute, quantities of PPCPs targeted by researchers, the most frequent being steroids and non-prescription drugs. Antibiotics, prescription medications, detergents, fire retardants, pesticides and natural and synthetic hormones were also present.⁶

A BIRTH CONTROL PILL WITH YOUR COFFEE?

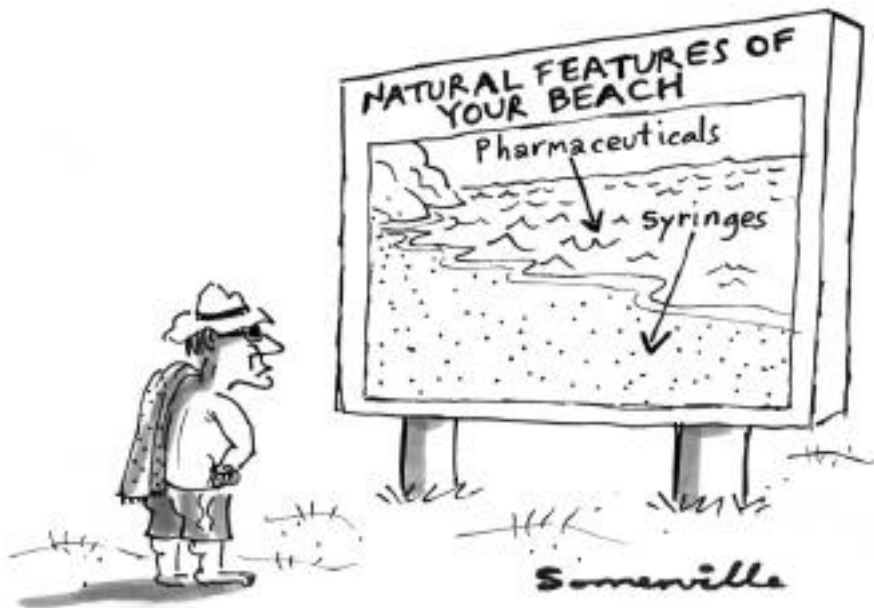
Synthetic oestrogen hormones are taken by millions of women worldwide as oral contraceptive control or hormone replacement therapy. Oestrogens are also prescribed to men for prostate cancer treatment. Both natural and synthetic oestrogens enter sewage treatment plants in large quantities; so do oestrogen-mimicking chemicals originating from the degradation of surfactants and plasticisers. Is it possible that steroid hormones could interfere with vulnerable hormonal receptors in living creatures? The jury is in...and the answer is "Yes!"

Results from a Canadian study provided concrete evidence of just what exposure to these chemicals portends. For three years, Canadian scientists added birth-control pills to a remote and pristine Ontario lake set aside for research to measure this impact. The result: all male fish in the lake—from tiny tadpoles to large trout—were "feminised", meaning they had egg proteins growing abnormally in their bodies.⁷ This was an unmistakable sign of hormone disruption. Feminised male fish have now been found in rivers and streams throughout the world.

In river otters, frogs and other living aquatic populations, the effect is the same: the presence of female hormones is making the male species less male—much less male. For instance, in the US state of Washington, scientists have found that synthetic oestrogens are drastically reducing the fertility of male rainbow trout. Another source of hormone contamination comes from the cattle industry. Hormones are leaking into streams and ground water from the 30 million hormone-implanted cattle in US feedlots. The endocrine-disrupting effluent

caused "significant alterations in the reproductive biology" of fish immediately downstream from a large Nebraska feedlot. The male fish had about one-third less testosterone and testes about half as big as unexposed fish upstream. The female fish had about two per cent less oestrogen and four per cent more testosterone than females from the uncontaminated section of the stream. In addition, lab tests confirmed that feedlot effluent contained a complex and potent mix of androgens (male sex hormones) and oestrogens (female hormones).⁸

Theo Colborn, senior scientist at the World Wildlife Fund (WWF) and co-author of *Our Stolen Future*, is very worried about pharmaceutical oestrogens mixing with chemicals already present in streams. "You can liken it to side effects of a prescription drug—you don't know how it's going to interact with the over-the-counter drugs you're taking. For example bisphenol A, a component of plastic, causes female mice to reach puberty earlier



than normal. Bisphenol A forms a weak bond with the body's estrogen receptors. It can scramble a cell's natural communication system and cause it to replicate too quickly. That, in turn, raises concerns about breast cancer in women. What happens if this compound, which is active at low levels of exposure, combines with estrogen from a birth control pill in the water? At this point, it's still unclear." Colborn fears it "could have long-term health effects".⁹

Evidence is already mounting on the impact of hormone mimics on humans. Studies have found that the average Englishman produces only a third as much sperm as a hamster. Average sperm counts in men have dropped by more than half over the past 50 years—from about 160 million millilitres of semen to 66 million.¹⁰ Could oestrogen-laced water contribute to sharply falling human sperm counts? In Europe, researchers have tied a decline in sperm counts to levels of oestrogenic hormones in the environment.¹¹

What about the effects on women and children? Unfortunately, the rising numbers of breast and uterine cancers, early puberty and hypospadias (a birth defect of the urethra and penis) reveal a most disturbing picture. It is not difficult to imagine how unnatural exposure to potent oestrogen hormones as well as oestrogen mimics could be seriously and irrevocably altering critical hormonal signalling for adults as well as even more vulnerable infants and children.

ANTIBIOTICS: TOO MUCH OF A GOOD THING

The release of antibiotics into waterways is particularly worrisome. Scientists at the Centers for Disease Control found eight antibiotics in the aquatic environment: trimethoprim, sulfamethazine, sulfamethoxazole, sulfadimethoxine, erythromycin, roxithromycin, lincomycin and enrofloxacin.¹²

In addition, US farmers use 70 per cent of all the antibiotics produced as a prophylactic treatment as well as a growth promoter for their cows, pigs and chickens. A huge amount of antibiotics-infused manure eventually finds its way into waterways and ground water.¹³

Detection of antibiotics in drinking water is of particular concern. The presence of these chemicals in the environment can lead to the development of resistant bacterial strains, contributing to antibiotic resistance. Some of the antibiotics detected were Class 1 drugs (the type used when other antibiotics don't work).¹⁴

Why is it that other antibiotics are less effective? No controversy there: general overprescribing and overdispensing of antibiotics by physicians and farmers.

A bacteria-phobic public now uses millions of pounds annually of triclosan, a broad-spectrum antimicrobial agent.¹⁵ Triclosan is a derivative of the herbicide 2,4-D. It is the active ingredient found in thousands of products such as antibacterial soaps, deodorants, mouthwashes, sponges and household cleaners. Triclosan's popularity has contributed to the antibiotic resistance problem.

If triclosan-initiated antibiotic resistance weren't bad enough, researchers at the University of Minnesota found that when triclosan in water was exposed to sunlight, it converted into a dioxin.

When first exposed to sunlight, triclosan becomes a mildly toxic chemical. The problem occurs when it becomes treated with chlorine at water treatment plants; it then breaks down to something even more potent.¹⁶ What is particularly ironic is that the use of triclosan-treated products has never been proven to be superior to regular soap and water.¹⁷

DRINK YOUR PROZAC AND CALL ME IN THE MORNING!

An estimated 157 million prescriptions for antidepressants were dispensed in the US in 2002.¹⁸ That's a lot of happy pills. The most popular kind is the selective serotonin reuptake inhibitors (SSRIs), which include Prozac, Zoloft, Luvox and Seroxat/Paxil.

In August 2004, major headlines in Britain announced that Prozac had been found in UK drinking water. Environmentalists described the situation as "hidden mass medication of the unsuspecting public". Since the UK, like the US, has no monitoring for levels of Prozac or other PPCPs, a serious public health crisis is brewing. In the UK, there has been a 166 per cent increase in antidepressant prescriptions since 1991—up to 24 million prescriptions a year. In fact, many countries around the world have had an exponential increase in the use of Prozac and other similar antidepressants.¹⁹

What might the drinking of Prozac-laced water portend? Animal studies offer some insights. Limited research shows that SSRIs elicit certain behaviours in shellfish. For example, bivalves' reproductive functions, including spawning, oocyte maturation and parturition, are regulated by serotonin. Researchers have found traces of Prozac and other antidepressants in the liver, muscle and brain of bluegill fish in Texas, as well as traces in people who don't take Prozac but do eat fish.²⁰

Low-level exposure to fluoxetine, the active ingredient of Prozac, delays both development in fish and metamorphosis in frogs. The researchers strongly suspect that results implicate a disruption of thyroid function. "We know that the thyroid levels peak with metamorphic climax,

when the legs and arms form and the tail resorbs. We believe that fluoxetine inhibits the thyroid, so we're measuring the thyroid hormone levels next."²¹ No one really knows what might be the effect when whole populations, including pregnant women and children, are getting traces of antidepressant drugs through their water supplies. It is known, however, that serious side effects of SSRIs include depression, insomnia, hallucinations, self-mutilating behaviour and violence. In fact, there are more questions about the possible side effects of PPCPs on humans and aquatic life than there are answers. It is a truly daunting task to assess the possible harmful effects of just one PPCP, much less the thousands that are in our water systems. And what might be the consequence of all those incalculable permutations of drug mixtures? It's all a big question mark.

WHERE DO WE GO FROM HERE?

The problem of this ubiquitous category of pharmaceutical and personal care pollutants has been clearly identified; the tricky part is what to do about it.

One most obvious action would be to choose non-toxic personal care products. They're better for your body and the environment. Reducing dependence on pharmaceutical drugs by using natural therapies is also another obvious step to take. Also, use the political process and make your feelings known at local, state and national levels. Support environmental organisations.

One practical solution to the flush problem would be a pharmaceutical take-back program, like those implemented in several European countries and in Australia and Canada. Maine, USA, recently legislated the creation of a drug mail-back program in which people are given envelopes they can use to send their unused drugs to the Drug Enforcement Administration. However, for the rest of the US, the

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drinking water.**

solution is quite complex since there is neither a cohesive set of regulations nor guidance for unused drugs.

The addition of even more pharmaceutical drugs is looming in the near future. Presently, drug companies target about 500 known biochemical receptors in the human body. That number is soon expected to jump as much as 20-fold—to 10,000 targets. Dr Daughton raises a disturbing thought. "The enormous array of pharmaceuticals will continue to diversify and grow as the human genome is mapped. This is adding exponentially to the already large array of chemical classes, each with distinct modes of biochemical action, many of which are poorly understood."

What about water sewage plants? According to Bill Turner, New Mexico's natural resources trustee: "It is a well-established fact that conventional sewage treatment technologies do not completely remove drug and chemical residues. Other methods, such as activated carbon filtration or treatment with ultraviolet light, likely would remove the drugs but could be costly."²²

Reverse osmosis also removes many of the large-molecule PPCPs, but it is expensive for municipal treatment facilities. However, there is still a waste disposal issue: the used membranes themselves and a leftover stream of dirty water. Other options might include UV or ozone treatment, both of which are less costly than reverse osmosis. However, both UV and ozone treatments tend to create numerous oxidation products, thereby increasing the number of chemicals present.

So, if we can't rely on the municipal water treatment systems, it's really up to each person to find solutions. It's obvious that homes, restaurants, hospitals, schools and businesses must realise the importance of providing water that's not only free of pesticides and heavy metals but also PPCPs.

It has been shown that the most effective water purification system for removing all these contaminants, including PPCPs, is an activated carbon filtration system. Units are available which can filter your tap water, but it would be far wiser to install a whole home unit. Since the skin absorbs chemicals 600 times more effectively than through ingestion, all bathing water as well as drinking water should be adequately filtered.

Make sure that, in the USA, the Water Quality Association (WQA) has accredited the system you select. To help people choose quality water treatment products, the WQA developed its Gold Seal Certification Program. The Gold Seal mark is internationally recognised as a symbol of quality and integrity.

Investing in a high-quality whole-house water system using an activated carbon filtration method which purifies all the water used in your home, i.e., drinking, bathing and washing, would be your best line of defence. At the very least, use an activated carbon filtered system for all your drinking water.

The day may come when pharmaceutical and chemical companies will take responsibility for the life cycle of their products, when the government will enact protective regulations for PPCPs, and when new sewage treatment technologies will be developed and installed. But for right now, it seems that we're on our own.

In a world of connectedness, we are again painfully reminded that nothing we do exists in isolation. Our most ordinary choices, in this case the drugs we ingest and the personal care products we use, may have lifelong consequences not just for us but also for all the unsuspecting people and wildlife living downstream. Remember, everyone lives downstream from someone.

About the Author

Sherrill Sellman, ND, author of the best-selling books *Hormone Heresy: What Women MUST Know About Their Hormones* (GetWell International, 1996, 2001 4th ed.) and *MOTHERS: Prevent Your Daughters From Getting Breast Cancer* (GetWell International, 2003), is an international lecturer and psychotherapist. She has contributed numerous articles to NEXUS, most recently "The Problem of Precocious Puberty" in 11/03. Sherrill can be contacted by phone on +1 (877) 215 1721 or by email at golight@earthlink.net. Her free monthly *HormoneWise* e-Digest is available at <http://www.ssellman.com>.

Endnotes

1. Welshons, W.V. et al., "Large Effects from Small Exposures. I. Mechanisms for Endocrine-Disrupting Chemicals with Estrogenic Activity", *Environmental Health Perspectives*, vol. 111, no. 8, June 2003, <http://ehp.niehs.nih.gov/members/2003/5494/5494.html>.
2. Deneen, Sally, "What Are Genetically Engineered Drugs Doing to Our Water Supply?", <http://www.waterindustry.org/Water-Facts/genetic-water.htm>.
3. Stiles, Nikki, *Small Flows Quarterly*, Winter 2004; 5(1):14-17.
4. Pearce, Fred, "Something in the water", *New Scientist*, 6 March 1999, pp. 18-19.
5. *ibid.*, p. 18.
6. Pitzer, Gary, "Pharmaceuticals & Personal Care Products: An Rx for Water Quality Problems?", *Western Water Magazine*, July/August 2004, at <http://www.water-ed.org/julyaug04.asp>.
7. Kidd, Karen, "Effects of a Synthetic Estrogen on Aquatic Populations: A Whole Ecosystem Study", Health Canada, Toxic Substance Research Initiative, http://www.hc-sc.gc.ca/hecs-sesc/tsri/research/tsri_94.htm.
8. Soto, A.M., et al., "Androgenic and Estrogenic Activity in Water Bodies Receiving Cattle Feedlot Effluent in Eastern Nebraska, USA", *Environmental Health Perspectives*, vol. 112, no. 3, March 2004, <http://ehp.niehs.nih.gov/members/2003/6590/6590.html>.
9. Knopper, Melissa, "Drugging Our Water", *E/The Environmental Magazine*, January 1, 2003, posted at http://www.keepmedia.com/ShowItemDetails.do?item_id=169029&extID=10026.
10. Lean, Geoffrey and Sadler, Richard, "British Men Are Less Fertile Than Hamsters", *The Independent* (UK), March 17, 2002, posted at <http://www.sciforums.com/archive/index.php/t-6743-8>.
11. Carlsen, Elizabeth et al., "Evidence for decreasing quality of semen during the past 50 years", *British Medical Journal* 1992; 305:609-613.
12. Uehling, Mark D., "Free drugs from your faucet", *Pure Water Gazette*, October 25, 2001, at <http://www.purewatergazette.net/freedrugs.htm>.
13. US Food & Drug Administration, http://www.fda.gov/cvm/index/narms/barlam/barlam_text.htm; Union of Concerned Scientists, "Hogging It: Estimates of Antimicrobial Abuse in Livestock", Executive Summary from UCS Report, January 2001, http://www.ucsusa.org/food_and_environment/antibiotic_resistance/page.cfm?pageID=264.
14. Uehling, op. cit.
15. "Toxic: Anti-Bacterial Additive Widespread In US Waterways", *Water and Wastewater Newsletter*, vol. 7, Jan 2005
16. "Anti-bacterial ingredient can become toxic: study", CBCNews Online, April 16, 2003, at http://www.cbc.ca/stories/2003/04/16/Consumers/antibacteri-al_030416.
17. Larson, E. and Weber, J. T., *Annals of Internal Medicine*, March 2, 2004.
18. Tothoroh, Gailon, "Five Years Gone: Anti-Depressants May Hold Key to Columbine", April 20, 2004, CBN News, <http://www.geocities.com/StNektarios/COLUMBINE.html>.
19. "Prozac 'found in drinking water'", BBCNews, August 8, 2004, <http://news.bbc.co.uk/2/hi/health/3545684.stm>.
20. "Frogs, fish and pharmaceuticals: a troubling brew", <http://www.baylor.edu/pr/index.php?id=13663>.
21. Holmes, Cat, "Antidepressants delay fish, frog development", University of Georgia College of Agricultural and Environmental Sciences, October 29, 2003, <http://georgiafaces.caes.uga.edu/storypage.cfm?storyid=2023>.
22. "Drugs detected in water samples from San Juan, Rio Grande", US Water News Online, October 2000, at <http://www.uswaternews.com/archives/arcquality/tdrudet10.html>.

Presently, drug companies target about 500 known biochemical receptors in the human body. That number is soon expected to jump as much as 20-fold—to 10,000 targets.

A SHORT HISTORY OF THE ROUND TABLE

In 1909, members of Alfred Milner's Kindergarten regrouped in London to found the Round Table for the purpose of creating an imperial federation covering Britain and all its dominions.

Part 3 of 4

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THE KINDERGARTEN RETURNS HOME

More than a few researchers have found attractive Quigley's argument that Cecil Rhodes's essential vision for the unity of the English-speaking peoples was a benevolent one. Commenting on the "international Anglophile network" that had grown out of both Rhodes's money and vision of Anglo-American unity, Quigley described as "commendable" this group's "chief aims", including to "maintain the peace" and "help backward, colonial and underdeveloped areas to advance toward stability, law and order, and prosperity..."⁸⁶

Taking his cue from Quigley, one prominent researcher suggested that Rhodes founded the Round Table "possibly with the best of intentions", including "a desire to stop wars", but following Rhodes's death in 1902 "the big switch was made and the Illuminati, in classic fashion, hijacked his creation".⁸⁷

To be sure, Rhodes was interested in world peace; but the Round Table was founded seven years after his untimely death and we cannot forget that in his "Confession" Rhodes dismissed non-British peoples as "despicable". But if we put aside these elementary errors it is worth noting that when the Kindergarten returned to Britain in 1909, it was not Cecil Rhodes's ideas they drew upon but Milner's visions and ambitions. More importantly, as we have already seen in part two, Milner's ideas on imperial federation fell somewhat short of the Anglo-American world government sought by Rhodes.

The Kindergarten received many reminders of Milner's commitment to imperial consolidation and disinterest in expanding the British Empire. Before his return to Britain in 1905, for example, Milner had given a farewell speech on the "great ideal of Imperial Unity" in which he argued for an empire "united *not in an alliance*—for alliances can be made and unmade... *but in a permanent organic union*".⁸⁸ In 1904, also in Johannesburg, Milner had declared himself prepared "to see the Federal Council of the Empire sitting in Ottawa, in Sydney, in South Africa—sitting anywhere within the Empire—if in the great future *we can only hold it all together*".⁸⁹

Another influence on the Kindergarten was Frederick Scott Oliver (1864–1934), an American businessman, aspiring politician and author of *Alexander Hamilton: An Essay on American Union* (1906)⁹⁰—a book hailed by leading Round Table members Leo Amery and Lionel Curtis as "the Bible" and "great inspiration" of their movement. According to Nimocks, rather than its being merely a biography of the famed American statesman, Oliver's book "is more accurately described as a five-hundred-page plea for imperial unity". Oliver drew comparisons between Hamilton's push to centralise authority in the North American colonies, and then argued for the British Empire's need to consider a similar course.⁹¹ Like Milner, Oliver was an advocate of imperial consolidation, not further expansion. He also shared a disdain for democracy; in fact, Milner believed Oliver to have "an aversion for Democracy".⁹²

LIONEL CURTIS'S PLAN FOR IMPERIAL UNITY

It was Lionel Curtis, probably the most zealous and idealistic of the Kindergarten members, who took the initiative, devising a step-by-step plan to unify the Empire based on their South African experience. This was perhaps inevitable, as he was the most avid proponent of the Kindergarten's devotion to imperial unity—hence his nickname, "the Prophet". As Amery noted, "His passionate sincerity and energy, as well as the indisputable logic of his arguments, tended to dominate our councils".⁹³

Educated at New College, Oxford, and one of the first of Milner's recruits in 1901,

Curtis very much defined all that contemporary critics disliked about Milner's Kindergarten. According to one biography of Curtis, the then young, confident, single-minded Curtis was considered a "flagrant example of precocious Kindergarten cocksureness" (Lavin). Curtis was also the Kindergarten's most enthusiastic advocate of the "organic union" of South Africa, writing its two most important propaganda tracts, *The Selborne Memorandum* (1907) and *The Government of South Africa* (1908). He possessed an unbounded zeal for extending the project of "organic union" not only to the British Empire but also to the world.⁹⁴ Curtis sought the support of Milner and The Rhodes Trust both to refine the plan further and bring it to fruition.

After returning to Britain in 1905, Milner turned to various other pursuits. Despite his socialist orientation, he refused a government pension and instead sought employment in the City, London's financial district, subsequently joining the boards of the London Joint Stock Bank, the Bank of West Africa and the Rio Tinto Company. He also continued his work with The Rhodes Trust, becoming its "most active member" according to Marlowe. At the same time, Milner renewed his acquaintance with Sidney and Beatrice Webb, founders of the Fabian Society. It was an odd relationship. Milner viewed his controversial departure from South Africa as proof that events were moving their way, while his "house of cards" was "tumbling down". Beatrice Webb in turn pitied Milner, thinking of him as "bitter and obsessed" and lacking in spirituality; only "God and a wife", she believed, would turn him into a "great man".⁹⁵

Milner also maintained his political interests, joining two dining clubs devoted to his pet concerns of imperial unity and tariff reform: the "Coefficients" and the "Compatriots". Founded by Sidney Webb in 1902, the Coefficients met monthly to discuss defence, imperial issues and the economy. The Compatriots, which concerned itself with tariff reform and imperial unity, was established by Leo Amery, a journalist who had associated with Milner and the Kindergarten while working as a correspondent for the *Times* during the Boer War and who, after the Kindergarten's return to Britain, was employed by Milner as one of his assistants. Milner provided funding to these groups and other activities out of The Rhodes Trust.

Quigley characterised the Compatriots and Coefficients as some of the "numerous groups and organizations founded by Milner...to create an immense nexus of influence and patronage for directing public policy in imperial and other matters".⁹⁶ This is an odd claim, given that Milner abandoned the Coefficients on the grounds that it was too divisive and then the Compatriots, once it was superseded by a more enduring creation—the Round Table.⁹⁷ There was no network—at that stage. Instead, with the return of the Kindergarten in 1909 and the appearance of Curtis's plan, Milner was suddenly seized with a desire to establish a more substantial movement for imperial federation, telling Amery of his newfound enthusiasm for creating a "single Imperial Unionist party all over the Empire".⁹⁸

During July and August 1909, Milner, Amery, Curtis, Oliver and other members of the Kindergarten, plus a host of other British establishment figures who were taken by Milner's vision

of imperial federation, met in a number of exclusive London clubs to discuss Curtis's plan. Curtis's scheme had three essential components:

1) to produce a memorandum, similar to *The Selborne Memorandum*, which would define the "imperial problem" as a basis for discussion;

2) to contact influential supporters of imperial federation throughout the Empire, especially in the press and parliaments, using the memorandum as a talking point, to establish a political organisation to promote the cause;

3) to publish magazines and other periodicals throughout the Empire that would carry the message of imperial unity, but under central supervision to ensure the message remained consistent.

As for the preferred model of imperial unity, according to Curtis biographer Deborah Lavin he proposed establishing "a central sovereign imperial authority directly elected by the people of the Empire to conduct foreign policy and control the armed services, raising taxation through its own officers".⁹⁹

CONFERENCE AT PLAS NEWYDD

In September 1909, Curtis's proposals to create an organisation to influence elite opinion in the cause of imperial federation were debated at the estate of Lord Anglesey at Plas Newydd in Wales.

In retrospect, the Plas Newydd conference became the model for other elite policy-planning groups in the 20th century—a model copied faithfully, if unwittingly, by the founders of the Trilateral Commission, the Bilderbergers, the Club of Rome and the World Economic Forum—with the power-elite gathering in exclusive and isolated locations for private conferences on grand geopolitical schemes.

Thus at Lord Anglesey's well-appointed estate (it even had a golf course and a cricket pavilion), with Milner leading the proceedings, the gathered supporters of imperial federation discussed the plans further. Curtis's blueprints for the propaganda methods of the organisation underwent little modification, and the immediate production of a memorandum on "imperial problems" was endorsed. That the British Empire must unite or disintegrate was accepted as a self-evident truth; however, the options of voluntary associations or alliances between Britain and its dominions were rejected as unstable and unsuitable alternatives to unity. As recorded by Philip Kerr (later Lord Lothian; 1882–1940), "it was thought that in the long run some form of organic union was the only alternative to disruption". Funding for the movement was also discussed, and was obtained from a number of benefactors including South African mining magnate Sir Abe Bailey and The Rhodes Trust. According to Quigley, The Rhodes Trust was to provide almost £24,000 to the Round Table in its first decade.¹⁰⁰

At a subsequent meeting, held on 23 January 1910 in Milner's offices in Manchester Square, "organic union" of the British Empire was formalised as the ultimate aim of the Round Table movement. According to a memorandum of the meeting, this required the "establishment of an Imperial Government constitutionally responsible to all electors of the Empire and with power to act directly on the individual citizens". The plan was to

At a subsequent meeting, held on 23 January 1910 in Milner's offices in Manchester Square, "organic union" of the British Empire was formalised as the ultimate aim of the Round Table movement.

establish an organisation or "moot" (an old English word for "meeting" or "assembly"), headquartered in England and with other branches throughout the empire, to discuss, debate and, it was hoped, bring to fruition the goal of "Imperial Union". In addition, a decision was made to publish a quarterly journal, *The Round Table*, as the movement's propaganda organ. It was at that point that Milner and his supporters "finally took the plunge and resolved to launch a political movement" (Watt). The movement quickly spread, with numerous Round Table groups made up of local "men of influence" forming in Canada, Australia, New Zealand, South Africa and India.¹⁰¹

This moment also marked the realisation of Rhodes's dream of an empire-spanning political network supporting imperial federation. With Round Table groups spread across the British Empire, and its members located in parliaments and the press—including Geoffrey Dawson as editor of the *Times* newspaper—the essential elements of Rhodes's original plan seemed in place. Could it succeed?

PROPAGANDA MESSAGE: "IMPERIAL PROBLEMS"

The Round Table founders hoped to achieve the "organic unity" of the British Empire, but in pursuing this goal they were motivated by three concerns. The first was their growing realisation that Britain was in decline; its ability to project power worldwide was beginning to ebb away. Milner, for example, in the introduction to a collection of his speeches published in 1913, warned that even though Britain was providing "peace and order" and "civilised conditions" for "2/5ths of the human race", "[s]ooner or later the burden must become too heavy for the unaided strength of that portion of the race which...dwells in the United Kingdom".¹⁰² Second, it was maintained that the British Empire in its current form was quite inadequate to the task of providing for the defence of all the dominions and colonies.

Related to this was the third factor—and according to Quigley, one of the "dominant considerations" behind the founding of the Round Table—which was "the fear of Germany, and federation was but one possible way of strengthening imperial defence".¹⁰³

Amery had best expressed these combined fears in a political speech in 1906, in which he also named the United States as one of Britain's new rivals:

*Every year the competition for power among the great world states is getting keener, and unless we can continue to hold our own...we shall be starved out, invaded, trampled under foot and utterly ruined. But how can these little islands hold their own against such great and rich Empires as the United States and Germany are becoming...? How can we...compete against states nearly double our size?*¹⁰⁴

Believing the British establishment was not sufficiently aware of this reality, the Round Table sought to ensure that warnings of Britain's inadequate defences and the growing threat from Germany formed an integral part of the propaganda efforts. These messages were subsequently incorporated into a two-stage

program. In the first part, the litany of "imperial problems" was to be given widespread exposure, while in the second, once the message of a weakened and vulnerable British Empire had sunk in, imperial union or federation was to be presented as the obvious and *only* solution.

The primary means by which their propaganda message was transmitted was through their journal *The Round Table*. As historian Walter Nimocks wrote in his study of the movement, this publication was noteworthy for the "remarkable consistency" in the content of its articles. This was because nothing the Round Table intended for public distribution was released without having been reviewed and debated at the moots and then revised to reflect the consensus position. Issues which eluded agreement, such as trade, were left out. This is clearly evident in the first four years of publication, where:

*The reader was constantly reminded of deficiencies in imperial administration which imperilled the future of the Empire. The irrational organization of the British parliament, the ineffectual nature of Imperial Conferences, and the injustice over the system which gave to Britain war-or-peace authority over supposedly self-governing nations were frequently examined... [and] the whole body of Milnerian criticism, and usually the Milnerian solution, was offered.*¹⁰⁵

In the first issue of *The Round Table* (November 1910), for example, all these themes, including the threat from Germany, were explored. The preface, written by editor Philip Kerr, introduced the new journal with the observation that "times are changing... [and] the methods of yesterday will not serve in the competition of tomorrow". Noting the possibility of "conflict" between Britain and Germany and that there was "no means of marshalling the whole strength and resources of the Empire effectively behind its will", Kerr hinted that there should be "some other means" whereby Britain and the dominions could quickly make the

The primary means
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required decision.¹⁰⁶

Another article in the same issue, also by Kerr, titled "Foreign Affairs: Anglo-German Rivalry", asserted that "the central fact in the international situation today is the antagonism between England and Germany... [and] the solution of this rivalry...is the most difficult problem which the [British] Empire has to face". Kerr characterised Germany as inherently aggressive and expansionist, as it was dominated by Bismarck's approach to world affairs: the relentless use of power. The growth of the German Navy meant that Britain could no longer protect the dominions. Moreover, Britain could not hope to rely upon an alliance with the other European powers, France and Russia; nor could it anticipate that an outbreak of "true democracy" would overthrow Germany's existing regime, curtailing its push for "world domination". There was only "one policy" left: that of shoring up British power to the extent that it would become "impossible for Germany to achieve her ambitions except by force". The logic was simple: Britain could no longer protect its empire under existing defence arrangements.¹⁰⁷

THE SOLUTION: IMPERIAL FEDERATION

The preferred solution to this dilemma was conveniently explained in the May 1911 issue of *The Round Table* on the eve of that year's Imperial Conference:

*The conclusion is inexorable. Either the nations of the Empire must agree to cooperate for foreign policy and defence, or they must agree to dissolve the Empire and each assume the responsibility for its own policy and its own defence... There is no third alternative. The present system cannot continue.*¹⁰⁸

This is, however, the high watermark of what the movement was prepared to reveal of its ultimate goals, at least in the early years. Most Round Table members agreed that advocating imperial federation too soon could prove unpopular. These fears were soon proved justified at the 1911 Imperial Conference, when the New Zealand prime minister, Sir Joseph Ward, proposed forming a permanent "Imperial Council of State" consisting of representatives from all the dominions. The British and Canadian prime ministers rejected his proposal outright, causing Milner to despair that the conference outcome had been "calculated to dishearten Imperialists everywhere". Opponents of the proposal were somewhat more joyous. "We have destroyed root and branch the proposal for an Imperial Council of State or Parliament", as South Africa's new prime minister, Louis Botha, cheerfully reported home.¹⁰⁹ Within the Round Table, dismay and anger abounded as suspicions grew that Curtis, who had coincidentally visited the New Zealand prime minister just before the conference, must have encouraged Sir Joseph to make his statement. The accusation was perhaps unfounded, yet it demonstrated their fear that Curtis's zeal for federation was such that he would recklessly disregard his own propaganda plan.

The other reason for the Round Table's reluctance to provide a detailed solution in its first few years is that its consensus position on imperial federation had yet to be finalised. The movement's hope was that it would soon have its own equivalent of the Kindergarten's *Selborne Memorandum* from which, in the words of one Round Table member, the "conspiracy would become the crusade".¹¹⁰ Yet the ensuing process of developing this model would not be smooth, revealing not only the growing divisions

among these self-appointed crusaders for imperial federation but their failure to foresee the impending failure of their grand scheme.

THE "GREEN MEMORANDUM"

The task of devising an acceptable model of imperial federation fell to Lionel Curtis. Immediately after Plas Newydd, Curtis was dispatched to Canada on a fact-finding mission on dominion nationalism. The report of his trip, the *Green Memorandum* (1910), followed a standard pattern. It identified the growing danger to the British Empire posed by a militant Germany, and then, after dispensing with other proposed remedies including "Imperial Cooperation", it launched into Curtis's preferred solution of "organic union".

Curtis called for the creation of an "Imperial Government" that would have absolute and unfettered control over all Empire defence and foreign policy matters. It would have the power to raise taxes, and there would be an "Imperial Federal Parliament" with two chambers to make necessary legislation.

Britain and the dominions would retain some powers, including setting tariffs, but would still be beholden to the imperial government on other matters. It was an ambitious document but one that seemed to cause more problems than it purported to resolve, spurring a long debate within the movement over the means

and ends, which would overwhelm even Curtis's "mesmeric hold" (Rose) over his associates.¹¹¹

According to Quigley, the Round Table "pretended to represent diverse opinions when as a matter of fact it insisted on unanimity...and eliminated diverse points of view very quickly".¹¹² The inaccuracy and illogic of Quigley's charge become evident when we consider the scope and vehemence of the Round Table's internal disagreements. In fact, the façade was the Round Table's *outward* image of ideological unity, maintained through the anonymous articles in *The Round Table*—a practice that merely hid the diversity of views and bitter debates within.

These divisions were most evident in Curtis's stormy relationships with his peers, his grandiose schemes on imperial unity leading to frequent clashes with Milner and Amery. While

Most Round Table members agreed that advocating imperial federation too soon could prove unpopular.

Endnotes

86. Carroll Quigley, *Tragedy and Hope: A History of the World in Our Time*, Angriff Press, 1974, pp. 950, 954.

87. David Icke, *The Robots' Rebellion: The Story of the Spiritual Renaissance*, Gateway Books, 1994, p. 154.

88. Quoted in Walter Nimocks, *Milner's Young Men: the "Kindergarten" in Edwardian Imperial Affairs*, Duke University Press, 1968, p. 130 (emphasis in original).

89. Quoted in George Louis Beer, "Lord Milner and British Imperialism", *Political Science Quarterly*, June 1915, p. 306 (emphasis added).

90. See Frederick Scott Oliver, *Alexander Hamilton: An Essay on American Union*, MacMillan & Co, 1906.

91. Nimocks, *Milner's Young Men*, pp. 127, 129 (Amery and Curtis quotes).

92. Quoted in A.M. Gollin, *Proconsul in Politics: A Study of Lord Milner in Opposition and in Power*, Anthony Blond, 1964, p. 314.

93. Quoted in Wm Roger Louis, *In The Name Of God, Go! Leo Amery and the British Empire in the Age of Churchill*, W.W. Norton & Co., 1992, p. 42.

94. John E. Kendle, *The Round Table Movement and Imperial Union*,

University of Toronto Press, 1975, pp. 16, 20, 57; Deborah Lavin, *From Empire to International Commonwealth: A Biography of Lionel Curtis*, Clarendon Press, 1995, p. 36; and Norman Rose, *The Cliveden Set: Portrait of an Exclusive Fraternity*, Pimlico, 2000, pp. 59-63.

95. Quoted in John Marlowe, *Milner: Apostle of Empire*, Hamish Hamilton, 1976, pp. 176-179.

96. Carroll Quigley, "The Round Table Groups in Canada", *Canadian Historical Review*, September 1962, p. 204.

97. Nimocks, *Milner's Young Men*, pp. 145-146; Marlowe, *Milner: Apostle of*

Curtis put his faith in a political solution, Milner and Amery both believed that economic unity was the key to establishing an imperial federation. For Milner, this meant complete free trade amongst its members but with a common tariff against the rest of the world that would bind Britain and its dominions more closely together.

Amery took a similar view, believing that economic solidarity would form the bedrock upon which a federal structure could then be placed. Closer economic union, he maintained, was the "master key of the whole problem". Milner also found fault with Curtis's idea of an imperial parliament, preferring full partnership for the dominions rather than their remaining permanently subservient to London.¹¹³

These were important criticisms. However, Curtis had a number of personality faults, including a dogmatic indifference to inconvenient facts—such as the growing desire of the dominions for independence—and an inability to assimilate contrary opinions. Subsequently his later works, in particular the three-volume *Project of the Commonwealth*, parts of which were published as *The Commonwealth of Nations* (1916) and *The Problem of the Commonwealth* (1916), again endorsed the construction of an organic union through a radical constitutional overhaul in Britain and the dominions and the establishment of a new supranational level of government.¹¹⁴

In *The Problem of the Commonwealth*, for example, Curtis argued that the "problem of government" in the British Empire would "lead to certain and world-wide disaster unless corrected". Curtis's solution was to create a "Commonwealth Cabinet"—ultimately responsible to a "Commonwealth Parliament"—that would "control defence, foreign policy and the decision of peace or war, and have the power to raise revenues for imperial purposes".¹¹⁵ For Curtis, there was only one alternative to "organic union": the dismantling of the British Empire. However, despite Curtis's intentions, his incendiary proposals in *Commonwealth* came close to splitting the Round Table and eroded support for imperial federation in the dominions.

Within the movement, Leo Amery opposed Curtis's proposals, arguing that it would be "constitutional hari-kari" [*sic*] to sacrifice the British system of government in order to establish an imperial union based on the US federal system. He also regarded as an illusion, if not a delusion, Curtis's belief that the political federation of the British Empire would inevitably lead to a "world-state".¹¹⁶

THE MOVEMENT FAILS

The internal bickering over the sensibility or otherwise of Curtis's increasingly utopian proposals for imperial federation were to prove of marginal concern in the long run. The fundamental issue of whether the dominions would support any proposal for imperial federation or "organic union" was neglected.

In particular for Curtis, who conducted numerous trips to local chapters of the Round Table in Australia, New Zealand, Canada and South Africa, it was inconceivable that the dominions would reject imperial federation. Yet for all his journeys, Curtis failed to see that the Round Table groups were hardly representative of dominion opinion.

As one New Zealand historian later observed, "In all the colonies the Imperial Federation movement seems to have been a stuffed shirt affair". Most of the imperial federation supporters in the dominions, especially the politicians, had their own expedient interpretations of the concept,

which they were quick to modify.

Moreover, they all operated in an environment of growing nationalism, which caused many of them to dispense with the federal idea once its popularity declined.¹¹⁷

What was invisible to Curtis had long been obvious to Round Table editor Kerr, who harboured growing misgivings about the entire project.

Following his journey to Canada with Curtis in 1909, Kerr wrote to fellow member Robert Brand expressing his doubts about the whole enterprise, including his feeling that forcing the federal solution on the dominions might only hasten their desire for independence:

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Empire, pp. 176, 179.

98. Nimocks, *ibid.*, pp. 133, 146; Milner quoted in Gollin, *Proconsul in Politics*, p. 163.

99. Nimocks, *ibid.*, pp. 134-136, 147-148; Lavin, *From Empire to International Commonwealth*, p. 108.

100. Nimocks, *ibid.*, pp. 148-151 (including Kerr quote); Kendle, *The Round Table Movement*, pp. 63-64; Lavin, *ibid.*, pp. 108-109; Quigley, "The Round Table", pp. 210-211.

101. Kendle, *ibid.*, pp. 70-71; David Watt, "The Foundation of the Round Table", *The Round Table*, November 1970, p. 425 (including quote from

memorandum); and Rose, *The Cliveden Set*, p. 88.

102. Quoted in Marlowe, *Milner: Apostle of Empire*, p. 201.

103. Quigley, "The Round Table", p. 219.

104. Quoted in Louis, *In The Name Of God, Go!*, pp. 53-54 (emphasis added).

105. Nimocks, *Milner's Young Men*, p. 190.

106. Quoted in *ibid.*, pp. 188-189.

107. Kerr quoted in Kendle, *The Round Table Movement*, pp. 108-110; and Rose, *The Cliveden Set*, p. 56.

108. Quoted in Kendle, *ibid.*, p. 111.

109. Milner quoted in *ibid.*, p. 114;

Botha quoted in Rose, *The Cliveden Set*, p. 67.

110. Anonymous quote in Marlowe, *Milner: Apostle of Empire*, p. 212.

111. Kendle, *The Round Table Movement*, pp. 74-80; Rose, *The Cliveden Set*, p. 66.

112. Quigley, "The Round Table", p. 218.

113. Marlowe, *Milner: Apostle of Empire*, pp. 183, 214; Louis, *In The Name Of God, Go!*, pp. 37, 42-43.

114. See Lionel Curtis, *The Commonwealth of Nations*, MacMillan

Continued on page 44

Lionel [Curtis] believes that the only hope for the Empire lies in "organic unity"... I think, now, that organic unity of that kind is impossible at any rate until science has revolutionised communication and transportation, and that to try to bring on a movement of that kind would be almost certain to break up the Empire... If you forced Canada to choose now between imperial federation and independence, I think she would take independence.¹¹⁸

Kerr's analysis of the inherent reluctance of the dominions to forgo the possibility of independence would soon prove quite accurate.¹¹⁹

Why he stayed on as *Round Table* editor, despite harbouring these doubts, is another matter. One explanation offered is that Kerr's "devotion to Curtis and his other friends" caused him to suppress his doubts.

For Kerr, this was to be an unsuccessful venture and is the most likely cause of his nervous breakdown in 1912, leading to his withdrawal as *Round Table* editor for nearly two years.¹²⁰

During the First World War, though, it became apparent to other *Round Table* members that Kerr had been right. At a conference sponsored by the Empire Parliamentary Association in 1916, for example, Milner outlined the *Round Table's* project for imperial federation, making many references to Curtis's works, "but found that not one Dominion member present would accept it" (Quigley).

The dominions' real preference was made clear to all at the Imperial Defence Conference of 1917, at which South Africa's minister for defence, Jan Smuts, drafted a resolution calling for "full recognition of the Dominions as autonomous nations in the Imperial Commonwealth".

It was in response to this growing evidence of dominion nationalism, according to Quigley, that the goal of imperial federation was "replaced or postponed in favour of the commonwealth project of free cooperation".¹²¹

The collapse of the *Round Table's* crusade for imperial federation became apparent at the imperial conferences of 1921, 1923 and 1926. The dominions (Canada, Australia, South Africa and

New Zealand) decisively rejected the model of imperial federation, in particular the calls for a constitutional conference that had arisen at the 1917 conference.

The final blow came with the Balfour Declaration of 1926 (not to be confused with the first Balfour Declaration of 1917 that paved the way for the founding of Israel), which finally defined the role of the dominions including their "equality" of status,

"autonomy" in external and internal affairs, "common allegiance" to the Crown and "free association" within the Commonwealth.¹²²

If the first Balfour Declaration can be said to have led to the creation of one state, the second such declaration bearing that name effectively marked the beginning of the end of the British Empire, converting it into a Commonwealth based on the free association of its member states.

On 11 December 1931, the declaration was enforced when the British Parliament passed the Statute of Westminster, which established the "legislative independence of the dominions". It also "solemnised the renunciation by England" of its "imperial mission" (Kelly).¹²³

With that, the cause of imperial federation was dead in the water and the ineffectiveness of the *Round Table's* attempts to decisively mould elite opinion revealed.

Part Four examines the Round Table's input into the League of Nations, and examines its legacy through to the present day.

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Continued from page 43

& Co., 1916; and Curtis, *The Problem of the Commonwealth*, MacMillan & Co., 1916.

115. Curtis quoted in Kendle, *The Round Table Movement*, pp. 179-180, 185-186; and Lavin, *From Empire to International Commonwealth*, pp. 111-112, 128-129.

116. Amery quoted in Louis, *In The Name Of God, Go!*, pp. 42, 37.

117. J.D.B. Miller, "The Utopia of Imperial Federation", *Political Studies*, vol. IV (1956), p. 196, quoting Keith Sinclair's monograph, *Imperial*

Federation: A Study of New Zealand Policy and Opinion, Athlone Press, 1955.

118. Quoted in Watt, "The Foundation of the Round Table", p. 431.

119. One might also note Philip Kerr's quite prophetic words on the importance of technological change to making the dream of a truly unified global political entity possible. As related with some enthusiasm in books such as Thomas Friedman's *The Lexus and the Olive Tree* (HarperCollins, 2000), recent rapid technological advances in communications and transportation have been the main physical drivers in the current era

of globalisation. The main political drivers have been the globalist elites.

120. Watt, "The Foundation of the Round Table", p. 432.

121. Quigley, *Tragedy and Hope*, p. 147; Smuts quoted in Rose, *The Cliveden Set*, p. 99.

122. Lavin, *From Empire to International Commonwealth*, p. 131; W.D. McIntyre, *Colonies into Commonwealth*, Blandford Press, 1968, 2nd ed., pp. 139-141; Kendle, *The Round Table Movement*, p. 272.

123. Paul Kelly, "Child of Empire", *The Weekend Australian*, 10–11 March 2001, p. 23.

CRATERS IN THE LAB

by Thunderbolts.info and Amy Acheson (Managing Editor) © 2004

How do you make a crater? Scientists have been asking that question ever since Galileo turned his telescope on the Moon in 1610. The discussion was between those who thought craters were made by volcanoes and those who thought craters were made by impacts. In the late 20th century, geologists on Earth and astronauts on the Moon showed that they weren't volcanic. The impact hypothesis won by default.

But there is a third possibility, one that has now been explored in detail by advocates of the "electric universe". The craters in the photo below were made in a laboratory by electric discharge. This cratered surface duplicates many characteristics of planetary geology. The craters tend to clump according to size, to fall in lines and arcs. Notice also that the ground appears burnt or discoloured where the discharge was strongest and the craters the densest—

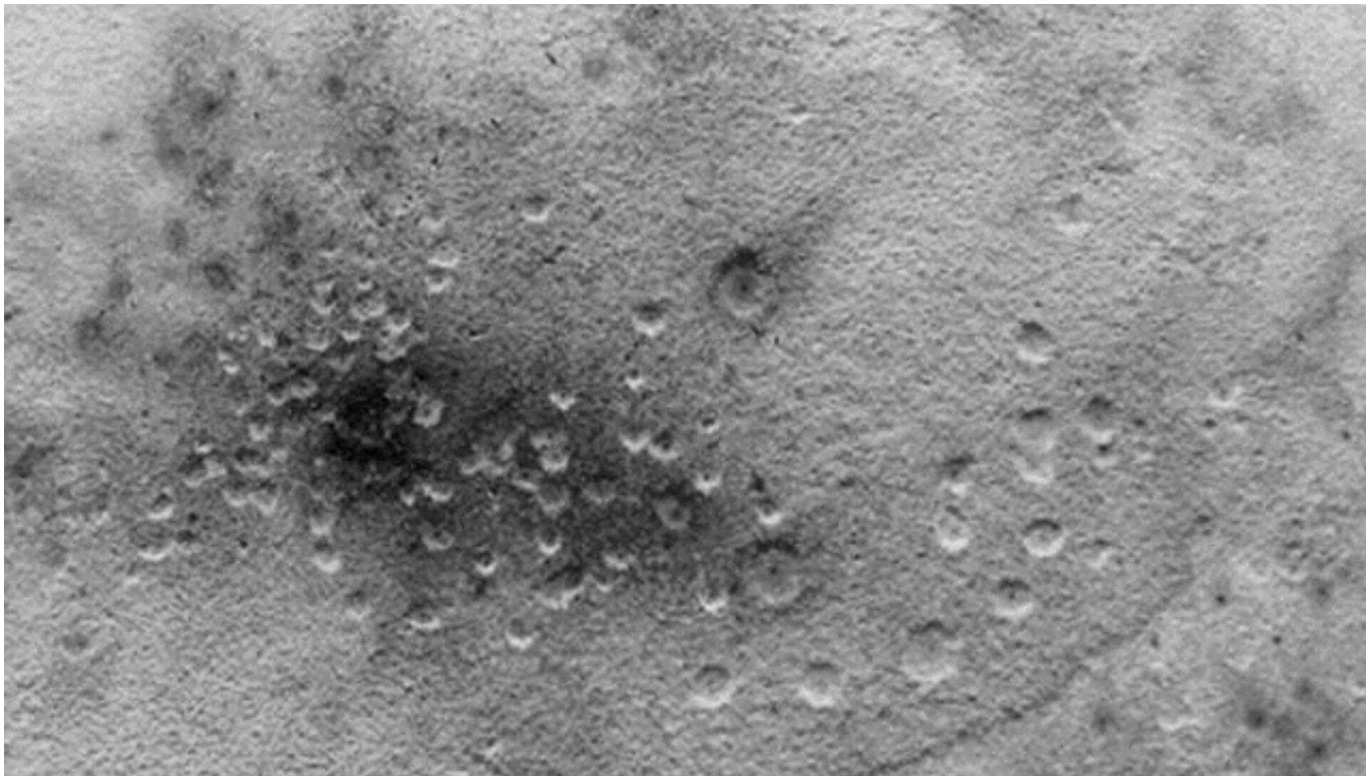
not unlike the surface of Mars and other rocky bodies in the solar system. The centres of some of the craters have bumps, as do many enigmatic craters on the Moon, Mars and other surfaces. Also of interest are the dark streaks from two larger craters close to the centre of the picture, a pattern similar to the "wind-streaked" craters found on Mars.

This third possibility was first voiced in the 1960s. But astronomers have had little interest in such lines of investigation because they have long assumed that electric forces cannot reach across the vacuum of space. However, numerous space-age findings have contradicted that belief. From the discovery of the Van Allen radiation belts in 1958 to the latest discoveries of galactic magnetic fields and X-ray galactic clusters, it has become increasingly clear that charged particles fill what once was called the "void" of space. Electrical activity is pervasive across both interplanetary and interstellar space.

Is it possible that our solar system was

once more active electrically than it is today? When electric sparks strike a solid surface, they can produce not only craters but many other common geological features as well. Experimental research on the electrical etching of rocky surfaces must therefore be a priority. According to the electrical theorists, most of the large-scale geological features in our solar system can *only* be generated by electric arcs. And if this is true, then the actual history of our solar system bears little or no resemblance to textbook descriptions.

(Source: Thunderbolts Picture of the Day for July 2, 2004, by Mel Acheson and C. J. Ransom; posted at <http://www.thunderbolts.info/tpod/2004/arch/040702craters.htm>. The experiment was performed at Vemasat Research Institute by C. J. Ransom, PhD, and Wal Thornhill, BSc, who are both members of the IEEE. Ransom is also a member of the American Physical Society. Wal Thornhill is the author of *The Electric Universe*; see <http://www.electric-universe.info>.)



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AN INTRODUCTION TO PARALLEL UNIVERSES

by Karen Klockner and David Brennan
© 2005

Abstract

The following article describes a rather odd incident and attempts to give explanation in the light of new findings and directions in the realm of quantum mechanics and theoretical physics.

The article is intended to provide the reader with a brief background into the current theories used to explain disappearances into parallel universes and the resulting time perception changes. Whilst the first part provides the reader with further references to writings in this area, the second part explains in layperson's terms how such phenomena could occur. Physics theories and spirituality beliefs are related to give the reader a picture of explanations from various but congruent perspectives for this paranormal experience.

Altered States

In the winter of 2002 a dressage rider having a lesson disappeared off the arena in front of the instructor, returning a few seconds later. The rider and instructor were unable to explain the phenomenon.

The rider had experienced a feeling of complete weightlessness and a visual perception of entering a haze-type atmosphere which appeared to be in another time dimension, but had still been conscious of being on the horse. The instructor acknowledged the disappearance of both horse and rider.

There is a growing bank of recorded tangible evidence that athletes experience changes in the perception of time. The perception of time speeding up or slowing down, especially during athletic performance, has been voiced by many famous identities who have experienced this variation in time perception.

The rider mentioned above had been experimenting with these time change occurrences through practical experience both at home and out at competition. The rider had come to regularly experience riding in a state of complete slow motion, described as a total perceptual awareness of nothing else but each step of the horse, taking perhaps five or 10 seconds—within which time the rider feels they have the ability to control every human movement with as much ease as needed and in as much time as required. The rider had been practising this distorted perception to determine whether the state of altered time consciousness could be entered into upon demand.

These changes in time perception are occurring in a similar psychological environment to what sports psychologists describe as an athlete being *in the zone* or *in the flow*, i.e., having an altered perception of transcending to a heightened level of mental awareness rather than of physical awareness. However, the experience of actually moving through a portal towards another dimension in space and time is in itself vastly different.

Paranormal Physics

Murphy and White (1995) have written an extensive account of some 6,500 stories of transcendent experiences and provide insight into just how many people are experiencing unexplained phenomena. The concept of time differentials is a growing area of interest in both investigations of the paranormal and in later theoretical physics work. Physicists are currently working on some very interesting theories which may ultimately help explain these types of occurrences, and which are briefly mentioned here.

Talbot (1991) states that "two of the world's most eminent thinkers", physicist David Bohm, a former protégé of Einstein, and quantum physicist Karl Pribram, pioneered the holographic paradigm, which basically states that the world as we view it is nothing more than a hologram, made up of "projections from a level of reality so beyond our own it is literally beyond both space and time" (p. 1).

Work by David Hawkins (1998) on the inquiry into human consciousness discusses the acceptance of David Bohm's idea of both an invisible *implicate* ("enfolded") order and a manifest *explicate* ("unfolded") order. Hawkins's study is comprehensive and describes his finding for a "wormhole between two universes—the physical world, and the world of the mind and spirit—an

interface between dimensions"; it also notes that the scientific insights reported correspond with the views of reality as passed down through history by enlightened sages who had evolved beyond consciousness to a state of pure awareness (p. 299).

The human energy field has been described as having a higher frequency or vibration than normal matter-energy. Hindu literature asserts that the energy body possesses a higher vibration than normal matter (Talbot, 1991).

It is put forward that human beings are made up of energy that is vibrating in a certain pattern—normally, particles forming a wave pattern. A wave is defined as a "vibrational pattern in space and time" (Capra, 1976). Capra wants readers to "picture our wave packet not as a pattern in space but as a vibrational pattern in time...the vibrational pattern represents therefore the uncertainty in the temporal location of the event" (p. 168).

If the vibrational rate of a human energy field could be increased to match that of another field vibrating at the same rate, the possibility could exist that the two energies would meld into one, the two parallels merging, perhaps resulting in the human energy field transcending into the different time and space dimensions of the other field.

Time anomalies continue to be experienced and ever increasingly reported. Talbot (1991) postulates: "Is the boundary between the present and the past so flimsy that we can, under the right circumstances, stroll back into the past...? At present we simply do not know, but in a world that is comprised less of solid objects traveling in space and time, and more of ghostly holograms of energy sustained by processes that are at least partially connected to human consciousness, such events may not be as impossible as they appear" (p. 228).



NEWSCIENCE NEWSCIENCE NEWSCIENCE

Studies into the Bermuda Triangle have led to theories that the disappearances are related to the planet operating on electromagnetism which could create vortices through which material objects can drop into or out of other space-time continuums (Berlitz, 1975). Whilst some believe that these portals exist and allow people to move through to other time dimensions, the central tenet of the situation is that there exists an energy field that enables vibrational fields to align and thus transcend one dimension to another dimension.

Experiences of this kind abound throughout history and the phenomenon cannot be related exclusively to any one race, group, religion or time period. The phase-shift experience has not only been the province of the individual, but also at times witnessed by groups of people who have gathered together for a singular purpose such as religious worship.

Physicists of the modern era have endeavoured to solve the big picture of life, the universe and everything by progressively making sense of and describing the laws of physics as their understanding of the subject gains breadth and depth.

One of the seemingly impossible theories that keeps coming back to haunt the theoretical physicists is the question of travel within this universe and, progressively, travel between parallel universes—leading to the theory of *multiverses*. There is an increasing consensus between different groups of scientists that the parallel universe/multiverse—once thought of as pure science fiction—may be entirely possible.

Ancient Writings

Having said that, let's examine the possibilities from an historical perspective. It is not expected for one moment that everyone will agree on the following explanation; it is merely an attempt to explain the authors' personal understanding of the issue.

Down through the ages, many races, cultures and philosophies have alluded in their writings to the existence of other dimensions. This has more often than not been expressed in the religious beliefs predominating within a culture, rather than in any of the other areas of the culture's existence.

One of the problems people in the modern age have in identifying ancient references to other dimensions or universes is dealing with the language and time/culture differences; in other words, how the culture described what

they believed or knew, as opposed to how we describe what we believe or know. Eminent theologian Dr Barbara Thiering, in her groundbreaking book *Jesus the Man* (1992), describes the considerable work involved in translating the ancient biblical texts into a form which can convey the exact context of what the ancients were trying to relate. The only way those ancient cultures could relate a phenomenon that they could not understand was to refer it to an act of the Divine.

With this in mind, Christianity's references to heaven having many mansions, the Shinto religion's references to seven heavens and the Hindu references to the many levels and aspects of Krishna would indicate other dimensions or levels of existence. These are only three of the better-known examples of what are perceived as references to what researchers in the modern age would call parallel universes or multiverses. Combine these

Because the ancient Tao masters knew that there are many parallel realities, they developed ways of accessing these by studying the ways in which energy works within given sets of circumstances.

with historical records from the Indian sub-continent of yoga masters who could *move in and out of the spirit worlds at will*, and you have a very good reference for the existence of other realms that could well be running parallel to our own. Countless other examples from many countries and time periods could be listed, but the point has been made.

It has been known and recorded in China for some 3,000 years that many parallel realities exist in the same space and at the same time and are kept separate by vibratory differences in the energies. The famous *Tao Te Ching* (Lao Tzu, 400 BCE) describes nothing less than the formation of the universe. Because the ancient Tao masters knew that there are many parallel realities, they developed ways of accessing these by studying the ways in which energy works within given sets of circumstances.

To the Tao master, the only thing that exists in any universe is energy, and the existence of all other phenomena is related directly to that energy and governed by it

under immutable universal laws.

Most readers would recognise the law of physics which states that energy can neither be created nor destroyed, only changed in form. Energy therefore comes in many and varied forms, and some of those can only be recognised by their effects on the environment and human senses rather than actually being seen by the eye.

Dimensional Doorways

How, then, does the phenomenon experienced by the rider occur?

Let's start with the mind and how certain types of actions have the ability to expand the mind's perceptions over and above what would be termed "normal reality". As is noted in all cases where this phenomenon occurs, the human being is either subjected to extremes of physical, mental, emotional or psychological stress or is so submerged in

concentration on what is occurring at the moment that the environment around them disappears from their consciousness for a short period of time, allowing their mind to achieve a state of absolute calm. This state is almost exactly the same as that reached by persons in deep-level meditation.

Psychologists have been able to measure these altered mind-states for many years and have amassed a good deal of evidence from subjects' reports of being transported to an alternate reality where everything seemed to be the same as normal, with the exception

that their senses were radically enhanced and everything seemed to be much more alive than in normal reality. The subjects also reported moving through what appeared to be a type of whitish haze before moving into the clear, alternate reality.

It is our contention that this is the first stage of the process of achieving a frequency level with the mind that harmonises with the frequencies of the dimensional doorways, allowing the person to temporarily move into a parallel reality and thus seem to disappear from this reality.

Traditionally science has dismissed this phenomenon as myth, generally reported by people who were both superstitious and easily swayed by religious piety. Things have changed, however, and scientists are now trying to solve seemingly impossible phenomena undreamed of as close as 30 years ago.

Tipler's (1994) *The Physics of Immortality* sees science and religion appearing to agree, at least in theory, on God, the Universe and Everything. Super-string theory, black holes,

NEWSCIENCE NEWSCIENCE NEWSCIENCE

singularities and a whole host of other seemingly absolute impossibilities are now being argued over regularly in the science institutes of the world. What could only be thought of as absolutely impossible not so many years ago is now not only possible but also entirely feasible during the next 50 years.

The question of parallel universes or multiverses is driven by our desire to explain the seemingly unexplainable and by the fact that science has found out that the universe is definitely finite.

Disappearing Aircraft

One of these seemingly inexplicable events that could only be explained with the theory of parallel universes is that of a commercial flight *en route* from Jamaica to Florida in the mid-1980s (as featured in a TV documentary called *The Devil's Triangle*). The pilots of the aircraft could see the Florida coastline at night from about 45 minutes out and started landing preparations. Meanwhile in the tower, all signs of the aircraft had disappeared from the radar and emergency procedures were being enacted to start a search for the missing aircraft. The pilots, unaware of the concern on the ground, called the tower for landing instructions, as routine, and were surprised to learn that they were just about to have search aircraft take off to look for them.

When the aircraft landed, the pilots were told they had been missing for almost 30 minutes. Further, the aircraft clocks and the timepieces of everyone on the aircraft were found to be 30 minutes behind the clocks at the tower.

The other point of mention in this event is that the pilots of the aircraft never lost sight of the Florida coastline. The only other thing they did notice was the absence of radio traffic, but they passed it off as a quiet period.

There are literally hundreds of reports that have similarities to this, from people of many different backgrounds who could in no way be taken as cranks or sensation-seekers.

The "M Theory" of Multiverses

Dr Michio Kaku, Emeritus Professor of Theoretical Physics at MIT, together with a group of other equally eminent physicists, is now looking at what is termed *M theory*. The "M" can mean *Membrane* or *Multiverse*, and it is a theory that has the possibility of showing us not only how the universe was created but also how to *create* a universe.

The closest explanation, in normal language, for the phenomenon of multiverses and their creation comes from using the example of a bottle of soft drink. While the

liquid is sealed within the bottle, the contents seem stable; but when the cap is unscrewed, the gas that is dissolved within the liquid reforms into gas and makes its way to the surface of the liquid.

Now if you pay close attention to what is happening within the liquid, the gas bubbles seem to appear out of nowhere; they rise and collide and form new bubbles, and there are thousands of them moving around in the same medium at once. The liquid, in this case, is the medium that allows for the formation of the bubbles, but what we cannot see are the currents and pressures that are operating at the sub-visual level within the liquid medium.

Now think of each bubble as a universe and the liquid as the membrane that supports the formation and movements of those universes. The unseen forces, in this case, are the currents and pressures that scientists refer to as the electromagnetic forces that act as *sheet dimensions*; they fulfill the same role as the surface tensions that surround each bubble in the bottle of soft drink. As in the soft drink, sometimes the bubbles will join at the surface tension areas at their edge, but not completely, still disturbing the membrane wall of each bubble.

Looked at in the light of M theory, this is one way of explaining the momentary disappearance of our rider and of other similar phenomena that have been reported hundreds of times down through history by people from many different backgrounds.

To finalise, one thing is sure: at the rate that our best theoretical physicists are solving what were once seemingly impossible phenomena, there is every possibility that those searching for the real answers shall be provided with them in the not-too-distant future.

Whilst this explanation is from the authors' own studies into unexplained phenomena, the authors in no way claim to know the answers to God, the Universe and Everything.

References

- Berlitz, C., *The Bermuda Triangle*, Granada, London, 1975.
- Capra, F., *The Tao of Physics: An exploration of the parallels between modern physics and eastern mysticism*, Flamingo, London, 1976.
- Hawkins, D.R., *Power vs Force*, Hay House, Carlsbad, CA, 1998.
- Lao Tzu, *Tao Te Ching* (trans. Ch'u Ta-Kao), Allen & Unwin, London, 1970.
- Murphy, M. and White, R.A. (1995), *In The Zone: Transcendent Experience in Sports*, Penguin Books, New York, 1995.
- Talbot, M., *The Holographic Universe*, HarperCollins, London, 1991.
- Thiering, B., *Jesus the Man*, HarperCollins, San Francisco, 1993.
- Tipler, F.J., *The Physics of Immortality*, Macmillan, London, 1994.

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"Wow, I bet somewhere in another universe, right at this moment, there are two people walking out of a cinema also wishing they hadn't just wasted two hours of their lives."

FREE ENERGY FROM TESLA'S WIRELESS ELECTRICITY

*The wireless
electricity
transmission system
pioneered by Dr
Nikola Tesla has the
potential to meet
our future global
energy needs, if
only the funding
and organisational
structures can be
put in place as a
matter of urgency.*

by Thomas Valone, PhD, PE

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The Wardencliff Tower Centennial in 2003 was an opportunity to celebrate a monument to Dr Nikola Tesla's visionary genius. Recently, a resurgence of interest from prominent physicists has focused on the unusual method of pulsing a broadband Tesla coil at a repetition rate of 8 Hz to resonate with the Earth's Schumann cavity.¹ Nikola Tesla, the father of AC electricity, is responsible for recognising that an atmospheric and a terrestrial storage battery already exists everywhere on Earth, for the benefit of mankind. This is perhaps the "wheelwork of nature" to which Tesla was referring.² A century later, only a few visionary scientists recognise the untapped renewable reservoir of *terawatts of electrical power* (3,000 gigawatts) that sits dormant above us, waiting to be utilised.

THE ELECTRICITY TRANSMISSION GRIDLOCK

In 2001, the Bush-mandated National Transmission Grid Study (NTGS 2001) was designed to identify the major transmission bottlenecks across the United States and identify technical and economic issues resulting from these transmission constraints. With deregulation of US utilities and the lack of jurisdiction for the Federal Energy Regulatory Commission (FERC), the US is fighting an electrical energy crisis which, right now, costs consumers hundreds of millions of dollars annually due to interregional transmission congestion. There is no longer any economic incentive nor any FERC eminent domain for states to provide rights-of-way, besides the lack of Federal compensation to utilities to build new transmission lines.

Historically, the creation of electrical utilities was beset with scandal, such as the six years of congressional hearings starting in 1928 in which "thousands of pages of testimony revealed a systematic, covert attempt to shape opinion in favor of private utilities, in which half truths and at times outright lies presented municipal systems in a consistently bad light".³ Today, US AID funds the US Energy Association to train utility representatives from the former Russian states on how to monitor electricity usage reliably and collect money from customers in their respective countries, while those economically challenged people struggle for sufficient wages.

At a December 2001 Washington, DC, conference which this author attended, called "Implementing a National Energy Strategy: Breaking Down the Barriers" and sponsored by the US Energy Association, only the depressing news about unresolved US electricity headaches was discussed. *Energy Daily* publisher Llewelyn King finally concluded: "We are using 19th-century technology for electrical transmission." He then called for a paradigm shift toward new technology and cited the "monster infrastructure problems" within the US as compared to the developing countries.

In June 2003, the US Department of Energy (DOE) held an emergency meeting with utility heads as a natural gas crisis loomed from the lack of diversification of new electrical power generation facilities. "Innovation in new technology and renewable sources [is] needed in the long term to improve the environment and meet rising demand", summarised an *Investors Business Daily* editor on the crisis.⁴

In November 2002, the American Council for The United Nations University called for *wireless energy transmission* to circumvent the need for transmission lines, as part of its Millennium Project. It announced that new funding is being offered by the National Science Foundation (NSF) in collaboration with NASA and the Electrical Power Research Institute (EPRI). The beaming of microwave energy and the creation of a world energy organisation were seen to actively address the 2020 challenges to global electricity supply,

especially in areas of massive urban concentration.⁵

In 1940, "the United States prided itself on using half the world's electricity".⁶ Since 1980, the US has also *doubled* its dependence on foreign oil and *doubled* its electrical transmission grid inefficiency. From 31 quads (quadrillion BTUs) generated, *two-thirds is totally wasted* in "conversion losses", with only about 11 quads (3.7 trillion kWh) delivered to the end-user.⁷ Instead of trying to build two power plants per week (at 300 MW each) for the next 20 years (only to have a total of an additional 6.0 trillion kWh available by 2020), as the Bush–Cheney administration wants to do, we simply need to *eliminate the 7.0 trillion kWh of conversion losses* in our present electricity generation modality.

HISTORY OF TESLA'S WIRELESS ENERGY

The fateful decision in 1905 by J. P. Morgan to abandon Tesla's Wardenclyffe Tower project on Long Island (after investing US\$150,000) was a result of learning that it would be designed mainly for *wireless transmission of electrical power* rather than for telegraphy. No more money was forthcoming for the project that Morgan initiated, even when the equipment alone cost about \$200,000. Morgan believed that he would "have nothing to sell except antennas [and refused] to contribute to that charity".⁸

Tesla tried and tried for years until, in 1917, the US government blew up the abandoned Wardenclyffe Tower because suspected German spies were seen "lurking" around it. With Edison as his willing ally, Morgan even publicly discredited Tesla's name, so that all of the five school textbook publishers of the time removed any reference to him. Is it any wonder why, even today, 100 years later, hardly anyone knows who Tesla is?

The rest of this article will present a physics and electrical engineering argument for a subsequently forgotten engineering alternative for energy generation and transmission.

As Tesla experimented with a 1.5 MW system in 1899 at Colorado Springs, he was amazed to find that pulses of electricity he sent out passed across the entire globe and *returned with undiminished strength*. He said: "It was a result so unbelievable that the revelation at first almost stunned me."⁹ This verified the tremendous efficiency of his peculiar method of pumping current into a spherical ball to charge it up before discharging it as a pulse of electrical energy: a "*longitudinal*" *acoustic type of compression wave*, rather than an electromagnetic Hertzian type of transverse wave. It was therefore more akin to electrostatic discharge than wave mechanics.

Tesla also planned to include a *stationary resonant wave* creation globally, within the Earth–ionosphere cavity, as part of the wireless transmission of power. Examining the pair of 1900 patents, #645,576 and #649,621, each using the same figure on the first page, we find in the first patent that Tesla designed a quarter-wave antenna (50 miles of secondary coil wire for a 200-mile-long wavelength). More important is the sphere on the top which is supposed to be a conductive surface on a balloon, raised high enough to be radiating in "rarefied air".¹⁰

As Tesla stated: "That communication without wires to any point of the globe is practical with such apparatus would need no demonstration, but through a discovery which I made I obtained

absolute certitude. Popularly explained, it is exactly this: When we raise the voice and hear an echo in reply, we know that the sound of the voice must have reached a distant wall, or boundary, and must have been reflected from the same. Exactly as the sound, so an electrical wave is reflected, and the same evidence which is afforded by an echo is offered by an electrical phenomenon known as a 'stationary' wave—that is, a wave with fixed nodal and ventral regions. Instead of sending sound vibrations toward a distant wall, I have sent electrical vibrations toward the remote boundaries of the earth, and, instead of the wall the earth has replied. In place of an echo I have obtained a stationary electrical wave, a wave reflected from afar."¹¹

Nikola Tesla's discovery of pulsed propagation of energy does not resemble the standard transverse electromagnetic waves so familiar to electrical engineers everywhere. Many engineers and physicists have dismissed Tesla's wireless energy transmission as unscientific, without examining the unusual characteristics and benefits of longitudinal waves—which are the z-component solutions of Maxwell's equations.

Tesla wrote: "That electrical energy can be economically transmitted without wires to any terrestrial distance, I have

unmistakably established in numerous observations, experiments and measurements, qualitative and quantitative. These have demonstrated that it is practicable to distribute power from a central plant in unlimited amounts, with a loss not exceeding a small fraction of one per cent in the transmission, even to the greatest distance, twelve thousand miles—to the opposite end of the globe."¹²

Tesla was an electrical genius who revolutionised our world with AC power in a way that DC power could

never have accomplished, since the resistance of any transmission lines (except, perhaps, superconductive ones) is *prohibitive* for direct current. He deserved much better treatment from the tycoons of his age, than to spend the last 40 years of his life in abject poverty. However, he was too much of a gentleman to hold a grudge. Instead, regarding the magnifying transmitter, Tesla wrote in his autobiography: "I am unwilling to accord to some small-minded and jealous individuals the satisfaction of having thwarted my efforts. These men are to me nothing more than microbes of a nasty disease. My project was retarded by laws of nature. *The world was not prepared for it. It was too far ahead of time. But the same laws will prevail in the end and make it a triumphal success.*"¹³

TESLA'S WORLD SYSTEM

Tesla's "World System" was conceptually based on three of his inventions:

1. The **Tesla Transformer** (Tesla coil);
2. The **Magnifying Transmitter** (transformer adapted to excite the Earth);
3. The **Wireless System** (efficient transmission of electrical energy without wires).

Tesla stated: "The first World System power plant can be put in operation in nine months. With this power plant it will be practicable to attain electrical activities up to 10 million horsepower (7.5 billion watts), and it is designed to serve for as many technical achievements as are possible without due expense."¹⁴

The fateful decision in 1905 by J. P. Morgan to abandon Tesla's Wardenclyffe Tower project was a result of learning that it would be designed mainly for wireless transmission of electrical power rather than for telegraphy.

Tesla's calculated power levels have been conservatively estimated and recently updated with contemporary physics calculations by Dr Elizabeth Rauscher. For example, Professor Rauscher shows that the Earth's ionosphere and magnetosphere contain sufficient potential energy, *at least three billion kilowatts* (three terawatts) respectively, so that the resonant excitation of the Earth-ionosphere cavity can reasonably be expected to increase the amplitude of natural "Schumann" frequencies, facilitating the capture of useful electrical power. Tesla knew that the Earth could be treated as one big spherical conductor and the ionosphere as another, bigger, spherical conductor, so that together they have parallel plates and thus comprise a "spherical capacitor".¹⁵ Rauscher calculates the capacitance to be about 15,000 microfarads for the complete Earth-ionosphere cavity capacitor. In 1952, W. O. Schumann predicted the "self-oscillations" of the conducting sphere of the Earth, surrounded by an air layer and ionosphere, without knowing that Tesla had found the Earth's fundamental frequency 50 years earlier.¹⁶

"All that is necessary," says Dr James Corum, "is that Tesla's transmitter power and carrier frequency be capable of round-the-world propagation." In fact, Tesla (in the *Los Angeles Times*, December 1904) stated: "With my transmitter I actually sent electrical vibrations around the world and received them again, and I then went on to develop my machinery." Dr Corum notes in an article on Tesla's ELF (extremely low frequency) oscillator that the tuned circuit of Tesla's magnifying transmitter was the whole Earth-ionosphere cavity.¹⁷

Corum explains that a mechanical analogue of the lumped-circuit Tesla coil is an easier model for engineers to understand. From a mechanical engineering viewpoint, the "magnifying factor" can be successfully applied to such a circuit. "The circuit is limited only by the circuit resistance. At resonance, the current through the circuit rises until the voltage across the resistance is equal to the source voltage. This circuit was a source of deep frustration to Edison because voltmeter readings taken around the loop did not obey Kirchoff's laws!"¹⁸ As a result, Edison claimed such a circuit was only good for electrocution chairs.

EARTH'S RENEWABLE ENERGY

Tesla's World System activates the Earth's renewable electrical storage battery, which normally sits dormant except during lightning strikes. Regarding simply the electrostatic energy storage capacity of the ionosphere, Dr Oleg Jefimenko, author of *Electrostatic Motors*, explains that during one electrical storm, the atmospheric electric field dissipates at least 0.2 terawatts (billion kilowatts), indicating that the entire Earth must have even more total available energy.¹⁹

Furthermore, the power loss experienced by Tesla's pulsed electrostatic discharge mode of propagation was less than five per cent over 25,000 miles. Dr Van Voorhies states that "path losses are 0.25 dB/Mm at 10 Hz"—which is so minimal it is difficult to believe for engineers who are used to transverse waves, a resistive medium and line-of-sight propagation modes that can dissipate 10 dB/km at 5 MHz.²⁰

The *capacitive dome* of the Wardenclyffe Tower, like the conductive balloon of Tesla's patent #645,576, is a key to understanding the longitudinal waves. Dr Rauscher quotes Tesla: "Later he compared it to a Van de Graaff generator. He also explained the purpose of Wardenclyffe: '...one does not need to be an expert to understand that a device of this kind is not a producer of electricity like a dynamo, but merely a receiver or collector with amplifying qualities'."²¹

Only a few great physicists, like Dr Elizabeth Rauscher, Dr James Corum and Dr Konstantin Meyl,²² have realised that Tesla was very practical when he proposed the resonant generation and wireless transmission of useful electrical power. Tesla's knowledge of atmospheric electricity transduction was so extensive and reliable that, said Jim Corum (who has been funded to continue Tesla's work): "You just have to do exactly what Tesla did and you will consistently get the same results he did."²³

After returning from his experiments at Colorado Springs in 1900, Nikola Tesla stated: "If we use fuel to get our power, we are living on our capital and exhausting it rapidly. This method is barbarous and wantonly wasteful and will have to be stopped in the interest of coming generations."²⁴

In view of our present fossil-fuel-caused global warming, Tesla seems very prophetic from his vantage point of a century ago.



Tesla's 187-foot Wardenclyffe Tower in 1903; it stood unfinished for the next 14 years. The two-storey power plant is in the background.

HIGH TRANSMISSION INTEGRITY AND LOW LOSS

Tesla stated: "As to the transmission of power through space, that is a project which I considered absolutely certain of success long since. Years ago I was in the position to transmit wireless power to any distance without limit other than that imposed by the physical dimensions of the globe. In my system it makes no difference what the distance is. The efficiency of the transmission can be as high as 96 or 97 per cent, and there are practically no losses except such as are inevitable in the running of the machinery. *When there is no receiver, there is no energy consumption anywhere. When the receiver is put on, it draws power. That is the exact opposite of the Hertz-wave system.* In that case, if you have a plant of 1,000 horsepower (750 kW), it is radiating all the time whether the energy is received or not; but in my system no power is lost. When there are no receivers, the plant consumes only a few horsepower necessary to maintain the vibration; it runs idle, as the Edison plant when the lamps and motors are shut off."²⁵

These amazing facts are explained by Corum, Spainol and Corum: "...the distinction between Tesla's system and 'Hertzian' waves is to be clearly understood. Tesla, and others of his day, used the term 'Hertzian waves' to describe what we call today energy transfer by wireless transverse electromagnetic (TEM) radiation...no one wants to stand in front of a high-power radar antenna. For these, E and H are *in phase*, the power flow is a 'real' quantity (as opposed to reactive power), and the surface integral of $E \times H$ (Poynting vector) is nonzero. The case is not so simple in an unloaded power system, an RF transformer with a tuned secondary, or with a cavity resonator. In these situations, the fields are in phase quadrature, the circulating power is reactive and the average Poynting flux is zero—*unless a load is applied*. They deliver no power without a resistive load. These are clearly the power systems which Tesla created. The polyphase power distribution system was created by him in the 1880s and inaugurated at Niagara Falls in 1895. The RF transformer was invented and patented by him in the 1890s. Terrestrial resonances he experimentally discovered at the turn of the century. And, for the next 40 years he tried to bring through to commercial reality this global power system. Today, millions of us have working scale models of it in our kitchens, while the larger version sits idle."²⁶

Note that for a spherical electrostatic pulse discharge, E is radial and H is helical since *J is radial* (longitudinal or irrotational current).²⁷ This is a total anathema to transverse wave physics textbook images of E and H, which are normally perpendicular to each other.

BIOLOGICAL AND ECONOMIC IMPACTS

Another common criticism of the Tesla wireless power system is regarding its possible biological effects. Calculating the circulating reactive power, the Corums and Spainol find a density of *a microvar per cubic metre* at 7.8 Hz, which is quite small, while it is well-known that such a frequency is very biologically compatible.²⁸ The authors also look at the present 100 V/m Earth-ionosphere field and again find that raising it by a factor of 4 to 10 will pose no ill effects (thunderstorms do it all the time around the world).

In terms of economic theory, many countries will benefit from this service. Only private, dispersed receiving stations will be needed. Just like television and radio, a single resonant energy receiver is required, which may eventually be built into appliances so that no power cord will be necessary! Just think: monthly electric utility bills from old-fashioned, fossil-fuelled, lossy-electrified wire-grid delivery services will be optional, much like cable TV is today. In the 21st century, "Direct TV" is the rage, which is an exact parallel of Tesla's "Direct Electricity".

Let us fulfill this prophecy of Tesla, making it a "triumphal success" by supporting a philanthropic, international wireless power station installed on a remote island to electrify the whole world. The benefits, immediately making direct electricity available everywhere, are too numerous to count.

With California electricity rates up to 15 cents per kWh (double the US average), the old-fashioned transmission grid method is becoming too expensive to maintain.

Become educated at <http://www.IntegrityResearchInstitute.org> about Tesla's wireless energy transmission discovery and the Wardencliff Tower's potential for transforming the world's generation and delivery of electricity. Read *Harnessing the Wheelwork of Nature: Tesla's Science of Energy* for more details about this discovery and other fascinating aspects of Tesla's inventions.

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Endnotes

1. Valone, Thomas (ed.), *Harnessing the Wheelwork of Nature: Tesla's Science of Energy*, Adventures Unlimited Press, Kempton, Illinois, 2002, p. 9.
2. Tesla said in his address to the American Institute of Electrical Engineers in 1891: "...it is a mere question of time when men will succeed in attaching their machinery to the very wheelwork of nature."
3. Utility Corporations, Document 92, US Senate, 70th Congress, 1st Session, 1928; see summary by Ernest Gruening in *The Public Pays: A Study of Power Propaganda*, Vanguard Press, New York, 1931.
4. Stavropoulos, William, "Natural Gas Woes Won't Disappear Unless Government Acts", *Investors Business Daily*, Perspective, June 2, 2003.
5. "Wireless Transmission in Earth's Energy Future" Environment News Service, November 19, 2002, <http://ens-news.com/ens/nov2002/2002-11-19-01.asp>.
6. Nye, David, *Electrifying America: Social Meanings of a New Technology*, MIT Press, Boston, 1997, p. 387.
7. "National Energy Security Post 9/11", US Energy Association, June 2002, p. 34.
8. Jones, H.W., "Nikola Tesla, Generator of Social Change", *Proceedings of the 1986 International Tesla Symposium*, pp. 1-89.
9. Tesla, Nikola, "World System of Wireless Transmission of Energy", *Telegraph and Telephone Age*, October 16, 1927, p. 457.
10. International patents as well as US patents are now available online at <http://gb.espacenet.com/espacenet/>.
11. Tesla, Nikola, "The Problem of Increasing Human Energy," *Century*, June 1900, p. 208.
12. Tesla, Nikola, "The Transmission of Electrical Energy Without Wires as a Means for Furthering Peace", *Electrical World and Engineer*, January 7, 1905, p. 21.
13. Tesla, Nikola, *My Inventions*, Hart Bros, 1982, p. 91 (emphasis added).
14. Bird, Christopher and Nicholson, Oliver, "Great Scientist, Forgotten Genius: Nikola Tesla", *New Age*, no. 21, February 1977, p. 74.
15. Rauscher, E. and Van Bise, W., "Harnessing the Earth-Ionosphere Resonant Cavity", in T. Valone (ed.), *Harnessing the Wheelwork of Nature*, p. 233.
16. Schumann, W.O., *Z. Naturforsch* 1952; vol. 72, pp. 149-154, 250-252. See also Jackson, J.D., *Classical Electrodynamics*, J. Wiley, New York, 1975, p. 363.
17. Corum, James and Corum, Ken, "Tesla's ELF Oscillator for Wireless Transmission", in T. Valone (ed.), *Harnessing the Wheelwork of Nature*, p. 219.
18. Corum, James, "Tesla and the Magnifying Transmitter: A Popular Study for Engineers", in T. Valone (ed.), *Harnessing the Wheelwork of Nature*, p. 198.
19. Jefimenko, Oleg, "Original Electrostatic Energy Resources, Electrostatic Generators, and Electrostatic Motors", *Future Energy: Proceedings of the First International Conference on Future Energy*, April 29-30, May 1, 1999, p. 70.
20. Van Voorhies, Kurt, "Prospects of Worldwide Wireless Power", in T. Valone (ed.), *Harnessing the Wheelwork of Nature*, p. 151.
21. Rauscher and Bise, op. cit., p. 236.
22. Professor Konstantin Meyl sells a "Demo Set" that is a miniature dual dome like Tesla's patent #645,576, a wireless longitudinal wave demonstration kit, available at http://www.k-meyl.de/Demo-Set/body_demo-set.html (enter this link at <http://www.freetranslation.com> for English translation).
23. Private conversation with Dr James Corum, June 15, 2003.
24. Nikola Tesla, 1900, as quoted in Bird and Nicholson, op. cit., p. 42.
25. Nikola Tesla, quoted in Minutes of the Annual Meeting of the AIEE, May 18, 1917 (emphasis added).
26. Corum, J., Spaniol, M., Corum, K., "Concerning Cavity Q", *Proceedings of the 1988 International Tesla Symposium*, pp. 3-15 (emphasis added).
27. Jackson, J.D., op. cit., p. 222 (see also sections 7.6 and 7.9 for pulse propagation through a highly dispersive medium like the ionosphere or magnetosphere).
28. *ibid.*, pp. 3-16.

MYSTERIES OF SIBERIA'S "VALLEY OF DEATH"

Eyewitness reports of the destruction of meteorites over Siberia in 1984 and 2002 by "terminator spheres" give further credence to accounts of the 1908 Tunguska explosions and the ancient legends.

Part 4

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MICROSPHERULES FROM THE TUNGUSKA EXPLOSION

Indirectly pointing in the same direction is the chemical composition of the microspherules found in the peat at the disaster site. These are unusual for meteoroids and are particularly rich in alkaline elements. Reasoning about the mechanism by which the terminators operate, we can assume that with their powerful electromagnetic charge they were supposed to attach themselves to a flying meteorite and alter its trajectory so that it passed out of the Earth's atmosphere. If the meteorite's trajectory was such as to make deflection impossible, the terminators simply destroyed the rocky splinters—literally melting the meteoritic substance, which subsequently hardened into tiny spherules.

Numerous soil samples taken at different distances from the destruction site have yielded magnetite spherules containing up to 10% nickel, which supports the idea that they came from space. Besides magnetite, silicate spheres have also been found. They range in size from 5 to 400 microns. The magnetite particles display a great variety of shapes and different surface characteristics. Besides the predominantly spherical formations, one can also find drop-shaped particles that were produced by the spattering of molten meteoritic substance under the influence of the colossal temperatures produced by the actions of the terminators. Some spherules have a shiny surface; others have a matte, grainy and even finely porous surface, which is due in part to the meteoritic substance vaporising when the matter was viscous. Often the spheres are hollow with a slag-like look to the inside. Sometimes one comes across conglomerations of magnetite and silicate spheres, indicating that they were formed at the same time and pointing to the complex composition of the Tunguska meteorite associated with the genesis of these spherules.

Work carried out in 1961–62 established that there is a certain pattern to the distribution of these spherules on the surface. The greatest concentration of them is found in a strip 50 to 60 kilometres wide, extending northwestwards from the epicentre of the meteorite explosion and which can be traced for over 250 kilometres.

In the disaster region, covering an area with a radius of about 130 kilometres from its centre at the Kulik site, there are three identifiable zones of peat enriched with microspherules. The first, with a thin sickle shape, curves around the epicentre. The second reflects the movement of the bolide in the region of zones 4 and 5, to the east and northeast of the Kulik site in the upper reaches of the Southern Chunia River and thus coincides with the start of the disintegration of the meteorite. The third zone, very large and amorphous, is located precisely in the region of Voronov's crater. It is no coincidence that the microspherules in this area display certain peculiarities of structure and formation that set them apart from those in the other zones, as the destruction of the meteorite took place directly in the ground and so material from the soil became mixed with meteoritic matter during vaporisation.

The bolide was completely vaporised by the explosion, and the products of that process were scattered in the form of extremely fine spheres over an area of 15,000 square kilometres. Their combined mass is estimated at around 10 tonnes. It is for this reason that all the expeditions that visited the area of the explosion found nothing of the meteorite itself, apart from a dusting of silicate and magnetite spherules that the blast wave spread across the entire Earth.

The *Olonkho* epic and surviving legends tell us that several decades after the epic flight of Niurgun Bootur, Kiun Erbiie ("the gleaming aerial messenger") took to the air,

heralding the appearance of Uot Usumu Tong Dুরাই. This suggests that the Tunguska explosion is identified as Niurgun Bootur.

THE 1984 CHULYM EXPLOSION

Decades passed, and then on 26 February 1984 a meteor crossed the sky of western and eastern Siberia at a height of roughly 100 kilometres, precisely following the trajectory of the 1908 Tunguska body. At that time, passengers in a bus observed from an elevated section of the Mirny highway far to the north a thin "pillar of fire" extending from the ground to the sky that then began to undergo various geometrical metamorphoses. The sight lasted several minutes. It was red in colour.

Fishermen in the area of the River Chona observed rising into the air from the hills to the north (the "Valley of Death" region) two enormous, shining spheres that, gradually picking up speed, soared vertically upwards and disappeared behind the clouds. The whole event took several minutes, after which time the clouds continued to glow for a while. Then, without reaching the ground, the bolide exploded in a shower of sparks in the area of the River Chulym.

An expedition dispatched to that area found, as with the Tunguska event, no traces of meteoritic material apart from magnetite and silicate spherules. They discovered no large-scale uprooting of trees, as the explosion took place at great height.

To all appearances, this was Kiun Erbiie, the herald of Uot Usumu Tong Dুরাই, and so by the start of the new millennium the researchers were in a fervour of expectation.

THE 2002 VITIM METEORITE

If the ancient legends are to be believed, the emergence of Uot Usumu Tong Dুরাই is always accompanied by terrible destruction. Expeditions to the Valley of Death area planned for the end of the 20th century and the beginning of this century were

postponed several times on account of reports from Siberia of animals migrating away from their intended destination. The researchers took the exodus of fauna as a direct indication of the complex's energy plant having entered another active phase.

What the researchers both awaited and feared, because of the highly unpleasant forecast contained in the *Olonkho*, took place in September 2002. The first report of the flight of a space body came from the American military. Drawing on data received

from a military satellite, the US Department of Defense distributed information about a large meteorite falling in the area of Bodaibo in the Irkutsk region of Russia. The satellite recorded the appearance of a shining object at a height of 62 kilometres, moving at an angle of 32 degrees to the horizon. Observation continued to the point where a powerful explosion took place at a height of 30 kilometres. Preliminary calculations put the power of the explosion at an equivalent of 200 tonnes of TNT.

The first interviews with witnesses to the Vitim meteorite explosion

pointed to a parallel with the Tunguska event in terms of phases of development. Despite the fact that the night of 24–25 September 2002 was overcast—a low 10% cloud cover with rain, the lower edge of the clouds being at 1,100 to 1,200 metres—there was no difficulty in establishing the sequence of events and spotting the obvious similarity to the Tunguska event.

In this case, everything followed the already familiar pattern and began with the exodus of fauna. Hunters questioned reported that animals left the area shortly before the Vitim explosion.

Thirty minutes before the explosion, the energy complex began to enter its most active phase. It is noteworthy that one of the witnesses questioned noticed that his dog became agitated and began to whine half an hour before the explosion!

The Energy Pillar and the Red Glow

A few minutes before the first explosion, the complex began to discharge the "terminators". Here are some eyewitness accounts.

Yevgeny Yarygin was on duty at the electrical distribution centre in the settlement of Muskovit:

...I was on duty in the switchboard room whose window faces south. The weather was cloudy, rainy, and it was drizzling. We were sitting and chatting. A glow appeared outside the window. Shadows appeared. The light was coming from the window. Through the windows we could see a bright hemispherical glow beginning to rise from behind the hills to the southeast [at a bearing of roughly 160–170 degrees; VU]. The light was white, like you get in welding. The white light seemed to rise upwards and behind it the light began to shift into the red and maroon [a red pillar was seen by the bus passengers before the Chulym explosion, and also by witnesses to the Tunguska explosion—VU]. Little "rays" were visible above the ascending hemisphere. The glow spread over the whole sky. The light was

A few minutes before the first explosion, the complex began to discharge the "terminators".



even and unbroken; we could not see any flying objects. The parting of the Yermikhi stream, above the watershed of which the glow was rising, was brightly lit. Then everything began to dim and went out. The glow lasted around 10 seconds.

I went out onto the landing outside, went to the fence and opened the door. By then about 30 seconds had passed after the disappearance of the glow. There was a penetrating report, an explosion, a very sharp bang. It made your ears ring and even made you weak at the knees. Plaster came down in the building. Everything moved and shook. There was a single bang. That was at seven minutes to two. But a distant noise had appeared even before the beginning of the glow—something like the roar from an aircraft [witnesses to the Tunguska explosion compared this noise with a three-inch shell in flight—VU]. The sound came from the same quarter as the glow, but the bang came from the opposite side, where the glow had been heading. I heard that someone was sitting in an arm-chair at home and the chair moved under them...

Victor Vedeshin, questioned by telephone on 22 October 2002, said:

...I was on duty that night at the boat station. A strong wind blew and at the same time a strong glow appeared in the sky. It was white, with a greenish tinge to it, bright like a welding spark or lightning, making your eyes hurt to look at it. Right then a shining flying sphere appeared. It flew beyond the horizon in the direction of Maximikhi...

Vitaly Valiuk, who worked at the town hall in Bodaibo, noted:

Eight minutes to two in the morning. Dense cumulus clouds in the sky. I was standing and smoking. Suddenly there was a flash. I thought it was lightning. But the glow grew as if someone was turning on one bulb after another. It became as bright as day. Some object flew from the southwest to the northeast... You couldn't tell if it was a sphere or not. It had a turquoise glow around it. It was perhaps the size of the lunar disc. And it had a tail behind it—reddish like the sparks from a bonfire. The angle of fall was about 60 degrees. The speed of the object was very high. While it all flew past, I had time to finish my cigarette and 30 seconds later there came a rumble, like a distant explosion...

Marina Kovaleva reported:

It was five to two. The light was strong. That light lasted a few seconds, then everything turned pink, then it got darker and darker and darker, becoming a reddish light. Then there was a rumbling. You got the impression, well, I don't know, like something below the ground, not clear but dull [a subterranean rumble from the working complex was also noted by witnesses to the Tunguska explosion who compared it to the rumble of train wheels—VU]. And after that rumble the window panes rattled...

The glow was visible in the settlements of Kropotkin and Mama, located around 140 kilometres on either side of the bolide's

presumed crash site. One of the witnesses stated:

Out of the blue my dog began to whine for no apparent reason. Suddenly we heard a strange noise—some kind of hum. Two or three seconds later there was a flash—white at first, then blue, then red and white again. And then, about three minutes later, there was a terrific bang. The china all fell off the table...

Just over three minutes before the explosion, the first "terminator" was delivered to a waiting position for a final reconnaissance before striking. The object detected by the American military satellite was not a meteorite or bolide. Its instruments recorded the flight of the first terminator as it plunged down to intercept the Vitim meteorite, which gets its name from

the place above which it exploded. A blinding flash lit up the taiga for a few instants with a bright light, like daylight, after which there came an explosion of such force that the blast wave, coming from a height of 32 kilometres, left all the dwellings for dozens of kilometres around without glass in the windows.

The researchers who made their way to the explosion site indicated by the US satellite saw pines on the way with their tops and branches torn off. Yet when the instruments indicated they had reached their destination, they could not find a meteorite crater

or even anything remotely resembling one. There was no large-scale uprooting of trees at the site because the first explosion took place much higher up than that at Tunguska and successfully deflected the meteorite away from inhabited settlements. However, significant uprooting of trees was observed, especially at the top of hills, by hunters Dmitry Sasun and Piotr Fiodorchuk to the southeast of the place visited by the researchers.

The Terminators in Flight

As with the Tunguska event, simultaneously with the first explosion other spheres were flying towards the spot from different sides. There are plenty of witnesses to this. For instance, Sergei Khamidulin noted:

The object detected by the American military satellite was not a meteorite or bolide.



On the night of 24 September I was fishing by the Kuduminskoye Islands [5–6 km below Mama on the River Vitim]. The sky was completely clouded over and it was spitting with rain. I was fishing together with my wife. Suddenly it turned bright, fully as bright as day. Then out of the clouds came an object. It seemed already to be flying low. It was giving off light like from welding, but you could look at it without your eyes hurting. The angular dimensions of the disc were less than the full moon. The sphere was crumbling (scattering sparks). During the flight we could hear a sound (there was some kind of "rustling"). It wasn't coming towards me, but passed close by (to the south). The object flew over the Vitim and disappeared behind a mountain to the northeast (the bearing of the "departure point" was 30–40 degrees). The light disappeared after the object was hidden behind the mountains. A minute or a minute and a half later there was a resounding crash, like thunder, that rang out twice. There was no blast wave or tremor.

This witness sketched the flying sphere with a tail.

Valentina Leontyeva works as a guard at the Lenzoloto gold-mining enterprise and was on duty that night. She noted:

...At two o'clock something fell. A round-shaped body rushed across the sky. A tail stretched out behind it. I thought "Is that a star?", but it was way too big. After 10 seconds there was an explosion, then a second. The door to my office even burst open...

The Vitim case provided plenty of evidence of the electromagnetic nature of the terminator spheres and their powerful effect on the environment.

In the town of Mama, in the area of the flight path, there was a power cut that night. At the moment the terminators appeared, the light-bulbs suddenly lit up (dimly, at half strength)! The explanation that specialist physicists came up with is that "the flight caused a powerful disturbance in the Earth's magnetic field, and the change in it led to current appearing in a closed circuit". Additionally, the coronal discharge known as St Elmo's fire—small glowing balls—appeared on pointed objects. That phenomenon is also associated with changes in electrical field, but this time in the atmosphere.

Georgy Kaurtsev, on the staff at the Mama airport, reported:

...That night there was no electricity. The settlement was without power. I woke up and saw a flash of light outside. The chandelier that was turned off started glowing half-strength. After

15–20 seconds, the "ground rumbling" began...

Vera Semionova and Lidia Berezan, security workers at the airport, went out onto the field around 1.50 am and saw lights shining at the ends of the fence posts around the weather station. The lights shone for a second or a second and a half. Mama was, incidentally, still dozens of kilometres from the flight path of the terminator.

As the terminator sphere was a powerful electromagnetic structure, it produced a humming noise like the crackling of high-voltage power lines. Many witnesses recalled that as the bolide passed they heard a distinctive "noise", "hum" or "rustling". The energy level was so high that it produced an electrophonic effect (generating an audible noise when in flight) and left a rainbow trail from which sparks flew.

Meteorite Destruction

After the first strike, which shifted the meteorite's course away from inhabited places, the other "terminator spheres" closed in and began methodically destroying the remnants of the intruder from space. That is why there were bangs from several collisions.

Olga Ponomareva, an operator at the telephone exchange, noted:

...I was on duty. I had just lain down. First there was a rumble; all the windows rattled. I thought someone was trying to get through on the switchboard. I answered, "Yes?"

No reply. "Who's there?" I asked. Then the light appeared, bright as day. There and gone. And the windows kept rattling. I thought it was an earthquake, but then why was it light? When the rattling began it was five to two. The glow lasted a matter of seconds, but the rattling seemed to me to go on for another five minutes. I went outside, too, to see who was knocking. And it was still rattling. There was a roar like a jet plane in flight.

First the roar, then the bang. That means there was a roar, then the glow (while the noise still continued), and then the bang (like at Sasovo).

Yevgeny Chechikov reported:

We were spending the night on the river... When the glow appeared, it was so scary that we dropped to the ground. Then when the glow stopped, we heard sounds from an explosion. We heard an explosion, then two more small ones, quiet, almost without any gap...

After the first strike, which shifted the meteorite's course away from inhabited places, the other "terminator spheres" closed in and began methodically destroying the remnants of the intruder from space.

Bibliography

1. *Astronomische Nachrichten*, 1908, Bd. 178, N. 4262, p. 239
2. N. V. Vasilyev, A. F. Kovalevsky, S. A. Razin, L. Ye. Epiktetova, *The Testimony of Witnesses to the Tunguska Fall* (in Russian), Tomsk, 1981
3. Felix Zigel, *The Tunguska Wonder – A Documentary History of an Unfinished Investigation* (in Russian), Moscow, 1975
4. Vladimir Rubtsov, *The Unknown Tunguska* (in Russian)
5. A. F. Cherniayev, *Stones Fall into the Sky: From the Tunguska Explosion to the Sasovo Explosion* (in Russian), Moscow, 1992
6. Materials from the researches of Alexander Gutenev and Yury Mikhailovsky, Mirny, Yakutia, Russia
7. A. Yu. Olkhovotov, B. U. Rodionov, *The Tunguska Glow* (in Russian), Moscow, 1999
8. V. I. Koval, "On the Track of the 'Tunguska Wonder'" (in Russian), *Zemlia i Vselennaya*, no. 5, 1989
9. G. F. Plekhanov, A. F. Kovalevsky, V. K. Zhuravlev, N. V. Vasilyev, article (in Russian) in *Izvestiya vysshikh uchebnykh zavedenii Fizika*, 1960, no. 2, p. 236f
10. K. G. Ivanov, *Meteoritics* (in Russian), Moscow, 1961, issue 21, pp. 46-48
11. K. G. Ivanov, *Geomagnetism and Astronomy* (in Russian), 1961, vol. 1, no. 4, p. 616
12. G. F. Plekhanov, A. F. Kovalevsky, V. K. Zhuravlev, N. V. Vasilyev, article (in Russian) in *Geologiya i geofizika*, 1961, no. 6, pp. 94-96
13. A. F. Kovalevsky, "The Problem of the Tunguska Meteorite" (in Russian), *Works of the USSR Geographical Society*, Tomsk, 1963, vol. 5, pp. 187-194
14. K. G. Ivanov, *Meteoritics* (in Russian), Moscow, 1964, issue 24, pp. 141-194
15. A. V. Zolotov, *Reports of the USSR Academy of Sciences* (in Russian), vol. 140, no. 1, 1961, pp. 103-106
16. A. V. Zolotov, *The Problem of the*

Sergei Chernyshev:

It was two or three in the morning. I wasn't sleeping, just lying there. The flash lasted about three seconds—white light so bright you couldn't look. I ran outside and it was dark. Roughly a minute passed. [He later said that 8–10 seconds had elapsed between the flash and the bang.] From the distance, from behind the mountains, came a triple echo. The walls in the house creaked. The sound came from the direction of Vitimsky. There were three explosions...

Alexander Sergy, head of the administration of the Vitimsky settlement, said when questioned on 26 October 2002:

People saw a sphere with a tail. The angular dimensions of the sphere were "less than the Moon". There was a noise that built up—quiet at first, then louder and louder, even becoming frightening. After the flash there was a bang, 15–20 seconds later, maybe thirty. The explosion was very powerful. People thought it was some sort of disaster, although they are used to explosions. If the explosion was at a height of 10 kilometres, then it was several tonnes (four to five) at a minimum, perhaps many times more. It's hard to judge the [TNT] equivalent with an aerial explosion. There was not one blast, but between one and six (like people banging the radiators)—through the air and ground... A staccato shaking of the ground, between two and six diminishing shocks...

As for the power of the explosion, preliminary assessments put it as three to four kilotonnes. Locals who are employed in mine workings where blasting powder is used stated that the explosion was of unprecedented strength. The blast could be felt across a radius of no less than 30 to 50 kilometres from the epicentre. It took the tops off trees. The blast wave left all the dwellings for dozens of kilometres around without glass in the windows.

As with Tunguska and Chulym, all the expeditions that went to the Vitim region found nothing except magnetite and silicate spherules that resulted from the destruction of a meteorite likely to have been carrying dangerous micro-organisms.

Many witnesses saw that, after the flight of the Vitim bolide, two large radiant points moved along the same course as the meteorite. For two days these "little stars" lit up the taiga by night, as if they were looking for something. The same thing was reported by witnesses to the Tunguska incident.

Many people said that after the flight of the bolide, a glow was seen in the sky for several days that was the result of the terminator spheres' powerful influence.

GEOMAGNETIC FIELD DISTURBANCES

It should be noted that atomic explosions at altitude change the conductivity of the ionosphere. This inevitably leads to a disturbance in the Earth's magnetic field—a so-called geomagnetic effect.

The geomagnetic effect of the Tunguska event was discovered in 1959 by four researchers from Tomsk: G. F. Plekhanov, A. F. Kovalevsky, V. K. Zhuravlev and N. V. Vasilyev. On old magnetograms dating from 30 June 1908, they found traces of an unusual disturbance in the geomagnetic field.

This makes it possible to suggest that the destruction of the meteorite caused an unusual disturbance in the geomagnetic field, similar to a magnetic storm with a sudden onset but unusually short duration.

One of the oldest doctors in the Evenk Autonomous Region, Dr A. N. Deskov, recollected that rumours of some afflictions did

circulate among the Evenk after the Tunguska event. For all the uncertainty of the situation, N. V. Vasilyev nevertheless observed that "in conditions of a complete absence of physicians or indeed any medical care, isolated cases of radiation sickness may have gone entirely unnoticed".

It is precisely for that reason that those who, thousands of years ago, designed and built the Installation in the Valley of Death use a high-altitude first strike to

shift the consequences of the explosions away from populated areas so that people do not suffer.

Who built the Installation in Yakutia's "Valley of Death", and why? Read about this in an upcoming edition of NEXUS.

About the Author:

Dr Valery Mikhailovich Uvarov is the head of the Department of UFO Research, Palaeosciences and Palaeotechnology of the National Security Academy of Russia, and has devoted more than 14 years to ufology as well as to the study of the legacy of ancient civilisations. He is the author of numerous papers on palaeotechnology and palaeoscience, as well as ufology and esoterica, published in the Russian and foreign press. He has initiated and participated in a number of expeditions to India and Egypt in search of material evidence of ancient knowledge. He is a regular speaker at international ufological conferences and gives lectures and seminars in Russia, the UK, USA, Germany and Scandinavia. He was a speaker at the 2004 NEXUS Conference in Amsterdam and the 2004 NEXUS Conference in Brisbane, and is also scheduled to speak at the May 2005 NEXUS Conference in Amsterdam.

Who built the Installation in Yakutia's "Valley of Death", and why?

Tunguska Disaster of 1908 (in Russian), Minsk, 1969, pp. 155-191

17. V. K. Zhuravlev, D. V. Demin, L. N. Demina, *The Problem of the Tunguska Meteorite* (in Russian), Tomsk, 1967, 2nd edition

18. A. N. Dmitriyev, V. K. Zhuravlev, *The Tunguska Phenomenon – a type of Sun–Earth interaction* (in Russian), Novosibirsk, 1984

19. A. T. Onufriyev, article (in Russian) in *Zhurnal prikladnoi mekhaniki i tekhnicheskoi fiziki*, 1967, no. 2, pp. 3-15

20. I. P. Pasechnik, *Space Matter on the Earth* (in Russian), Novosibirsk, 1976, pp. 24-54

21. I. P. Pasechnik, *Space Matter and the Earth* (in Russian), Novosibirsk, 1986, pp. 62-69

22. V. K. Zhuravlev, "The Problem of the Tunguska Meteorite" (in Russian), *Works of the USSR Geographical Society*, Tomsk, 1963, vol. 5, pp. 195-197

23. N. V. Vasilyev et al., *Shining Nocturnal Clouds and Optical Anomalies Connected to the Fall of the Tunguska Meteorite* (in Russian), Moscow, 1965, pp. 62-64

24. G. M. Ildis, Z. V. Kariagina, *Meteoritics* (in Russian), Moscow, 1961, issue 21, pp. 32-43

25. V. K. Zhuravlev, A. N. Dmitriyev,

Meteorite Researches in Siberia (in Russian), Novosibirsk, 1984, pp. 128-141

26. L. A. Mukharev, article (in Russian) in *Radiotekhnika i Elektronika*, 1985, vol. 30, no. 6, pp. 1151-1158

27. N. P. Chikov, *Space Matter and the Earth* (in Russian), Novosibirsk, 1986, pp. 215-217

28. A. N. Dmitriyev, *Current Issues in Meteoritics in Siberia* (in Russian), Novosibirsk, 1988, pp. 105-113

29. N. V. Vasilyev, N. P. Fast, *The Physics of Mesospheric (Silvery) Clouds* (in Russian), Riga, 1970, pp. 95-101.



A BRIEF ACCOUNT OF THE TRUE NATURE OF THE "UFO ENTITIES"

by Gordon Creighton © 1983

This article was first published in the quarterly UFO journal Flying Saucer Review in October 1983 (vol. 29, no. 1) and reprinted due to popular demand in FSR, Autumn 1988 (vol. 33, no. 3).

Our congratulations to Flying Saucer Review for reaching a significant milestone: its 50th year of publishing groundbreaking ufological news.

— Editor

One of the more curious features of the followers of the various religions is that being so dogmatically certain that in their own particular little faith they already possess the whole Truth about all things in Heaven and Earth, it almost never occurs to any of them to look elsewhere and find out what the followers of other religions may know or may have discovered.

This is certainly a pity, for study of all the great world-religions—and notably Islam—would yield valuable clues as to the true nature of the so-called "UFO phenomenon" and would rapidly eliminate much of the fatuous "space-age mythology" that has been spawned in such profusion over the last three decades.

Islam knows, in fact, of the existence of *three* entirely separate and distinct species of intelligent beings in the Universe, and indeed can furnish surprisingly precise details regarding their natures, roles and activities.

Angels, Men and Jinns

The first category is, of course, that of the Angels or Messengers (Greek: *Angelos*; Hebrew: *Malach*; Arabic: *Malak*). These are high beings created of light.

The third category is that of *Men*, with bodies created, according to the Qur'an, of clay, or, in other words, this being poetic language, they have physical bodies assembled from the mineral and chemical elements of our Periodic Table—the "planetary body", as Gurdjieff called it.

The second category, however, and the one with which we are here concerned, is the category of those beings (created before man was) who are referred to collectively in Arabic as *al-Jinn*. Although there is some dispute about it among Arabic grammarians, most of their lexicologists seem to hold that the word derives (as Arabic words almost invariably do) from a verb root, namely *janna*, "to hide or to conceal"—indeed, a very fitting derivation for the name of these creatures.

Whereas the bodies of Angels are of light and the bodies of men are of the gross elements of the Earth, the bodies of *al-Jinn* consist of what is variously translated as

"essential fire" or "essential flame", "smokeless fire" or "smokeless flame", and it is specifically stated in the Qur'an (sura XV, 26 and 27) that *they were created before mankind was*. (Some scholars have speculated that these might be the "pre-Adamic men" whose existence is hinted at here and there in the Holy Bible.)

There has been much debate among modern students of Arabic as to precisely what these terms *min nari al-samumi* and *min marijin min narin* can conceivably mean in modern parlance, and some scholars have concluded that, in using these terms, the Prophet Muhammad (the peace and blessings of Allah be upon him) was here attempting to describe what Western occultists have tried to describe by such terms as *ether*, or maybe the so-called *etheric* or *astral planes*. (I have also seen it suggested that some sort of *plasma* is indicated.)

(Needless to say, such concepts as *etheric plane* and *astral plane* have no meaning for modern science and, so far as I know, apart from Dirac the physicists have abandoned their speculations regarding the existence of an ether.)

The Source of the Jinns

Wherever it is that the Jinns are thought of as being normally located, it seems highly likely that the source of many of them, at any rate, is not very distant from us. Some Muslim scholars who have become aware

of the current Western research into the so-called "UFO phenomenon", and have reflected awhile upon it, have concluded—and I think correctly—that maybe the best way we can start to visualise these matters is by thinking of the Jinns as being *very close indeed to us, and yet, at the same time, somehow very far from us*; in other words, on some other dimension or in some other space/time framework, "right here" or maybe in a world of antimatter right here, or occupying, as it were, some other universe that is here, behind Alice's mirror—"a mirror-universe on the other side of the space-time continuum", as it has been neatly put by some investigators.

The Qur'an, however, is not clear on this, and admittedly it looks as though it is very possible that some of the Jinns could be fully physical and what we call *extraterrestrial*, while other species of them are of an altogether finer sort of matter, corresponding to what various UFO investigators have tried to indicate by such terms as *ultraterrestrial* or *metaterrestrial*.

In thinking about these ideas, we might bear in mind the theory of the Russian philosopher P. D. Ouspensky regarding the possible existence of other, more subtle, levels of matter on which the elements of the Periodic Table of our own chemical world are repeated—and, if I understand him aright, repeated more than once, on more than one level. The early writings of Dr Meade Layne in the USA about the "dense etheric world", from which he maintained that the UFO entities and their craft originated, should also be borne in mind. Certain of the benevolent Jinns may well be our "Guardians".

That there is some close affinity or some link of destiny between Jinns and mankind seems certain, for although the vast majority of the Jinns are devils, *shaytans*, nevertheless we are assured in the Qur'an that some among their many species are "goodies" and are capable of salvation. For it is specifically stated that Muhammad was sent as a Messenger to both mankind and the Jinns, so that, in the "Final Days", some of the Jinns will enter into Paradise while the rest of them will be cast down into Hell. Their revelation to Iblis, the Top Devil ("Satan"), is in general somewhat obscure. In the Qur'an, Iblis is certainly described as a Jinn; but elsewhere in the Qur'an, he is also described as an Angel. (Surely the explanation is that Iblis is that same high being, originally of angelic

status, who rebelled against God and is named in the Christian texts as "Lucifer"?)

Had we the space, much more might be said about the Jinns and their doings, but only a brief account of their main characteristics can here be given. Their principal features, as listed below, are as I have gathered them from all the Muslim written and traditional sources that I have been able to consult over the past 15 years. Readers can see for themselves the parallels with the reported features of UFO entities and can draw their own conclusions. I hope I do not have to labour the point, space being precious.

Chief Characteristics of the Jinns

1. In the normal state, they are not visible to ordinary human sight.
2. They are, however, capable of materialising and appearing in the physical world. And they can alternately make themselves visible or invisible at will.
3. They can change shape and appear in any sort of guise, large or small.
4. They are able also to appear in the guise of animals.
5. They are inveterate liars and deceivers, and delight in bamboozling and misleading mankind with all manner of nonsense. (See the average spiritualist seance for examples of their activities, and also the usual "communications" from UFO entities in close-encounter cases.)
6. They are addicted to the abduction or kidnapping of humans.
7. They delight in tempting humans into sexual intercourse and liaisons with them, and Arabic literature abounds with accounts of this kind of contact by mankind with both the "goodies" and the "baddies" among the Jinns. There is also even a considerable number of accounts of encounters between the "goodies" and famous Muslim

saints. For example, the book *Manaqib al-Arifin* has a number of very significant references to contacts between such higher beings and Jalal al-Din Rumi, Islam's greatest mystical poet, who lived from 1207 to 1273.

In official Islam—and this cannot be overemphasised—the existence of the Jinns has always been completely accepted, even legally, and even to this day in Islamic jurisprudence. The full consequences implied by their existence were worked out long ago. Their legal status, in all respects, was discussed and fixed, and the possible relations between them and mankind, especially in relation to questions of marriage and property(!), were seriously examined by jurists—as the greatest and most authoritative Western source, the *Encyclopaedia of Islam*, confirms.

Stories of sexual commerce between Jinns and mankind have been of perennial interest to Arab readers, and it is important at this point to mention that in Chinese literature (and in China, the Han population are not Muslims; only certain of the smaller minority peoples of the northwest and far west are) there is also a considerable tradition of this sort which awaits examination by ufologists.



"In light of developments this year, we have moderately revised our list of future global liberation interventions: the Bahamas, Western Samoa, Antarctica, Transylvania, Euro-Disney and New Jersey."

THE TWILIGHT ZONE

The great Arabic literary catalogue known as the *Fihrist*, compiled in the year 373 of the Muslim calendar (CE 995) by Muhammad bin Ishaq bin Abi Ya'qub al-Nadim al-Warraaq al-Baghdadi, lists no less than 16 works dealing with this theme. (Compare these with the European occultists' records of sexual contact between men and female sylphs as well as the copious mediaeval Christian records relating to *incubi* and *succubi*.)

Most Westerners will discount all this talk about the Jinns with the usual argument that the Arabs "are barbarians, anyway". Let me therefore point out that, in CE 995, when the *Fihrist* was written, the brilliant civilisation of the Arabs was incomparably higher than anything elsewhere in the world except for China, and that the Christian, Western Renaissance owes its origins as much to our contact with Islam (via the Crusades) as to the early percolation of Greek learning to the West. As a matter of fact, quite a lot of the philosophy and the literature of the Greeks reached us first not in Greek at all, but in the Arabic translations secured from Cordoba and Toledo in Spain in the 10th and 11th centuries when the Muslims still held most of Spain.

It is only in the last few centuries, and particularly since the Industrial Revolution and the growth of modern materialistic science, that the West has forged ahead. But in 1200 CE, Muslim science was in the

lead, particularly in such fields as medicine, mathematics and astronomy, and it would be grossly imprudent to assume that our current "superiority" over them has anything permanent about it.

8. The Jinns are wont to snatch up humans and teleport or transport them, setting them down again—if indeed they ever do set them down again—miles away from where they were picked up, and all this in "the twinkling of an eye".

The Arabian tradition asserts that, throughout all known history, there have been a few particular human beings who, through some strange favour, have "been in league with the Jinns".

9. The Arabian tradition asserts that, throughout all known history, there have been a few particular human beings who, through some strange favour, have "been in league with the Jinns" or "had a compact with the Jinns" to such a degree that the Jinns have endowed them with what we regard as "preternatural powers", i.e., psychic powers. These humans have consequently become known as "wonder-

workers", "soothsayers" and "magicians" (either "white" magicians or "black" magicians, depending of course upon what sort of Jinns they were in league with).

Here again, compare the European tradition about individuals who have discovered how to collaborate with the kingdom of the *sylyphs* or *fairies*. For example, there is the case of the "working partnership", not more than 70 years ago, between a sylph

and a highly successful Parisian dealer in rare old books. The sylph made its contribution by acting as the "scout" and finding out where and in whose possession the rare books were. All the dealer had to do then was to approach the owners and offer to buy!

10. Finally, along with all these displays of prowess by the Jinns, there goes a tremendous telepathic power and the ability (to use an age-old term) to "cast a glamour" over their human victims. Our UFO records are already full of evidence of this.

Subtle Control and Interference

How much of what we see happening today, at the highest levels of international politics as well as in ordinary human affairs, can be attributed to this subtle control and interference in our lives by insidious and unseen forces? Indeed, this is one of the prime reasons for the parlous state in which man finds himself. Some recent reports from UFO investigators hint at alien plans to provoke war here and drive the Gadarene swine (mankind) over into the abyss.

The present-day Christians, who generally seem to have very little sense of curiosity, are apparently quite happy to pass their days in total ignorance of all this. But a careful study of the New Testament (and only in the original Greek!) will show clearly that nothing of what is said above was unknown either to the Teacher and Healer Jeshu of Nazareth or to his principal followers, particularly Paul. Incidentally, Christians may like to know that in Islam the full name and title of Jeshu is "Issa, Son of Mary, Word of God".

Long before the rise of Christianity or Islam there were, of course, other great teachers (messengers) who perceived clearly the situation in which mankind finds itself. One of these was Zarathustra (Zoroaster) in the old Iranian civilisation of the Achaemenidae, about 600 or 700 years BCE. The great religious text left by Zarathustra is the Avesta, which tells us much about the demonic forces, referred to under the blanket term of Ahriman, the Enemy of Light. Mankind, in this teaching, is seen as a special creation of Ormazd, the Supreme Spirit, who is locked in permanent conflict with Ahriman.

The soul of man is the object of the war, and man himself is the battlefield.



Dr Rudolf Steiner

In our days, there has probably been no teacher who saw and understood all this more clearly than the great Austrian, Dr Rudolf Steiner (1861–1925), founder of the Anthroposophical Society.

Clairvoyant from childhood, Steiner saw into the other worlds and planes and saw deeply into the human heart, and no books or teachings are so relevant as his are to the crisis of mankind that is now upon us. His lectures throughout 1917, for example, show clearly that he foresaw, in their totality, the political, social and military results and the police-state tyranny which would inevitably follow from the Russian Revolution, just as the "Lady" of the apparitions at Fatima also did in the same year.

Steiner foresaw what would result in the world as a whole from a materialistic science run mad: the development of "test-tube" man, "biological engineering" and other horrors; the deliberate creation and development of living monsters; and the soulless, Godless, dehumanised, computerised, insect-like chromium and plastic slave world of *1984* that may now be at hand.

According to Steiner, a tremendous and crucial round in the battle was fought out in the last 30 years of the 19th century, and on the Inner Planes, between the Forces of Ahriman (the term he took over from Zarathustra) and the Forces of Light. These latter are conventionally known to the Western, Christian tradition as the "Cohorts of Michael". Steiner said that the fight ended in a complete victory for the Light, but that as a result of it a great many of the powerful demonic beings had been actually cast down upon planet Earth, with the consequence that their presence and their influence now impinge more than ever upon the prospects and the destiny of mankind.

Steiner taught that the coming years will see incredible upheavals, in the course of which this great battle will be carried forward to its conclusion, inside every human heart. (See Rudolf Steiner, "Der Sturz der Geister der Finsternis" ["The Overthrow of the Spirits of Darkness"], a series of lectures given in 1917.)

The objective of the Forces of Darkness is to take over the stream of human evolution, to merge with it and to divert mankind from the evolutionary development "planned" for it. The end result of this

would be new creatures in which those qualities that represent the highest that we know would have been eliminated.

Smart-alecky modern man of the Pop Age, the "trouserape" as he has been called, has of course no use for all this sort of "rubbish", and immense numbers of our species have discarded all belief in the existence of demons, along with any belief in the Great Power that rules the Universe.

There is a delightful passage in C. S. Lewis's *Screwtape Letters* where the Senior Devil, talking to one of his underlings, makes a profoundly important remark: "Of course, our greatest trump-card is the fact that everybody *knows* we don't exist" (or words to that effect). Similarly, the vast majority of mankind *knows* that Jinns and UFOs and UFO entities don't exist. And what a nice advantage that is for the entities!

But what if *Homo sapiens* were in for some big shocks in the near future? What then?

With the recent advance of science, man has rapidly become aware of the vastness of the cosmos and of the probability that there exist out there innumerable other physical worlds inhabited by intelligent beings, some of which, for all we know, may be (as we dearly hope) identical with men, with our tastes and our values, our hopes and our fears.

It is natural that some among us,

surveying the impasse into which we have got ourselves, might well be tempted to look up to the stars in the hope that someone wiser than we are might arrive one day from there and give us all the easy answers.

If there be any truth in the ancient story that the inhabitants of Magonia, unlike men, do not possess the possibility of developing immortal souls and therefore are anxious to acquire such by mating with us and mingling their life-stream with ours, what moment could be more propitious to them for achieving their purpose than now?

Editor's Note:

Gordon Creighton, MA, FRGS, FRAS, British diplomat, civil servant, linguist and UFO enthusiast, died on 16 July 2003, aged ninety-five. He was a regular reader of and contributor to *Flying Saucer Review* from its inception in 1955, and he later sat on the journal's board and was its editor from 1982 until his death. His obituary can be read at the *FSR* website, <http://www.fsr.org.uk>.

Flying Saucer Review is now celebrating half a century of publication. The entire *FSR* archive is now available on a series of CDs at £10.00 each. To obtain these or back copies or to subscribe to this quarterly journal, visit the *FSR* website, <http://www.fsr.org.uk>, email Lunula9@aol.com or write to *FSR* Publications Ltd, Post Office Box 585, Rickmansworth, Herts WD3 1YJ, UK.



"Looks like they decided to leave the whole Twin Towers site problem to market forces."



REVIEWS

BOOKS

Reviewed by Ruth Parnell

THE ENERGY MACHINE OF T. HENRY MORAY: Zero-Point Energy & Pulsed Plasma Physics by Moray B. King

Adventures Unlimited Press, USA, 2005
ISBN 1-931882-42-8 (200pp tpb)
Availability: NEXUS offices; **Europe**—
Frontier Publishing, <http://www.fsf.nl>;
USA—Adventures Unlimited, website
<http://www.adventuresunlimitedpress.com>

Thomas Henry Moray (1892–1974) was one of the great pioneers in the so-called "free energy" field, yet he was hounded, persecuted and suppressed by the authorities because of his far-sighted discoveries and inventions. One device, first demonstrated in the 1920s, was an energy machine that could tap "radiant energy" and yield 50 kW of electricity without using any input power. Engineer and researcher Moray B. King has already written extensively about his namesake, T.H. Moray, in *Tapping the Zero Point Energy* (reviewed in 2/13) and *Quest for Zero Point Energy* (9/03). His new book, *The Energy Machine of T. Henry Moray*, is a succinct summary, with diagrams and photos, of the inventor's key discoveries and how he tested and applied them.

King believes that the fundamental operating principle that Moray discovered is that "abrupt, synchronous ion surges in plasma appear to coherently activate the zero-point energy". However, it looks like Moray used a weakly radioactive source as a catalyst to make the plasma. Over the years, other frontier researchers have further explored

Moray's principles and devices, and here King acknowledges their contributions to the field. Researchers such as Paul Brown, who created a glow plasma oscillator, Paulo and Alexandra Correa, who invented a pulse abnormal glow discharge (PAGD) tube, and Ken Shoulders, who discovered that charge clusters can arise from precursor pulses, are just three who have been inspired by and have progressed Moray's work.

The point-form style of King's text makes digestion of this complex technical material easier, and the extensive bibliography provides a wealth of leads for serious researchers—whom King encourages to do their bit towards making a new, safe, plentiful energy source available to mankind.

HOW TO PHOTOGRAPH THE PARANORMAL

by Leonore Sweet, PhD
Hampton Roads, USA, 2005
ISBN 1-57174-411-8 (202pp tpb)
Availability: Hampton Roads Publishing Co., <http://www.hrpub.com>

Hand in hand with the recent digital camera revolution has come an upsurge in the recording of an intriguing phenomenon: light orbs. There's been a long history of strange balls and streaks of light as well as anomalous mists and "ectoplasm" being described and in later times captured on 35 mm film, often in connection with "ghost hunts". Now, though, with the relative inaccessibility of digital compared with film photography and certain technical attributes of the new technology, these phenomena are much more readily accessible for recording.

Having marvelled at a few photos of light orbs I'd already seen in UFO magazines and the Ramtha journal *The Golden Thread*, I'm

open to what Dr Leonore Sweet presents in *How to Photograph the Paranormal*—so much so, I'm about to load up my old 35 mm SLR camera to take some night shots with flash, just to see what results I get before I finally invest in a digital camera to do more of the same! If you want to go down this path, there's advice from Dr Sweet on how to go about it, including on the best camera to have (a low-resolution megapixel camera often has the best results) and what to take on an orb-hunting trip.

According to Dr Sweet and her collaborating brother Peter, you'll find these light orbs just about everywhere—but you're more likely to find them if you intend to, because whatever they are they seem to respond favourably to positive human thought and can even have playful qualities.

Drawing on her long-time interest in esoteric studies, Dr Sweet explores the territory and posits hypotheses to attempt to explain the reality of this phenomenon in its old and new guises and suggest what we can conclude from it. An exciting field of research.



REVIEWS



THE CARBON DIOXIDE SYNDROME: Learn why changing your breathing can improve your health and wellbeing

by Jennifer Stark and Russell Stark

Buteyko Online Ltd, NZ, Australia, 2002

ISBN 0-473-09610-2 (259pp tpb)

Availability: **Australia**—Buteyko Online,
tel (07) 3397 0244; **NZ**—Buteyko Online,
email info@buteyko.co.nz, website
<http://www.buteyko.co.nz>

The Buteyko method has grown in prominence in recent years as a means of controlling asthma, but it's less well known that the method is useful in treating a variety of other disorders including allergies, panic attacks, hypertension, pain, sleep apnoea and snoring, chronic fatigue, diabetes, epilepsy and more. All of these conditions are explained in this book by Buteyko practitioners Jennifer and Russell Stark, who brought the technique to New Zealand from Australia in the early 1990s. They've helped thousands of people "restore normality to their lives" through the practice of the special Buteyko breathing exercises.

What's common to asthma and many other disorders mentioned above is hyperventilation, and it's a normal reaction to stress. However, it is an abnormality of breathing control which has one breathing in excess of metabolic needs. It removes too much carbon dioxide from the lungs and then the bloodstream, delivers less oxygen to the body, makes the blood too alkaline, causes smooth muscle spasms in the airways and increases histamine production. The Starks explain the biology of this so-called "carbon dioxide syndrome" and how it can be overcome with the right kind of breathing that

restores normal blood gas pressure. They also provide advice on recognising and controlling the triggers for stress, and feature testimonials from many people whose lives have been changed for the better through the Buteyko method.

WHAT REALLY CAUSES ALZHEIMER'S DISEASE

by Harold D. Foster

Trafford Publishing, Canada, 2004

ISBN 1-41204921-0 (271pp tpb)

Availability: Trafford Publishing, website
<http://www.trafford.com>; author's website,
<http://www.hdfoster.com>

The incidence of Alzheimer's disease and other forms of dementia is rising faster than the population is ageing, which leads Harold Foster, BSc, PhD, to conclude that the increase is not due to a genetic cause, although there are gene variants that can make some individuals more susceptible than others. (We've run his articles and reviewed his books on AIDS and schizophrenia in NEXUS 10/05 to 11/03.)

The main culprit behind this rise, according to Foster's Multiple Antagonist Hypothesis as outlined in *What Really Causes Alzheimer's Disease*, is aluminium. It can readily cross the blood-brain barrier and interfere with key enzymes and their cofactors, especially calcium and magnesium. It causes abnormal proteins to build up in the brain, forming neuritic plaques and neurofibrillary tangles, and it strips the nerves of their protective myelin sheath, leading to retrogenesis—the loss of the patient's abilities in the reverse order to which they developed from infancy.

Using a wealth of scientific studies to back up his hypothesis, Foster explains not just

the genetic and biological factors involved but the environmental factors. For instance, southern Norway, which has the world's highest mortality rate for Alzheimer's disease, has acidic drinking water that lacks calcium and magnesium because of the local geology and contains high levels of aluminium. But the risk factors are all around us if we drink and bathe in water treated with aluminium sulphate as a flocculant as it is made deficient in calcium, magnesium and silicic acid, and if we eat foods from soils depleted of these elements. We're also at risk if we eat denatured processed foods, consume drinks from aluminium cans and use aluminium saucepans and foil when cooking.

By cutting down on these environmental sources of aluminium, we can do much to prevent the onset of Alzheimer's and the plague proportions that are expected in a few years' time if we do nothing. Foster also suggests natural remedies with benefits in improving memory and removing toxins from the system and he lists foods high in calcium and magnesium to combat excess levels of aluminium. An important book.





REVIEWS

A MERE GRAIN OF SAND: The extraordinary story of Britain's most remarkable spiritual healer by Ray and Gillian Brown with Paul Dickson

Tagman Worldwide Ltd, UK, 2004
ISBN 1-903571-47-2 (247pp tpb)
Availability: Tagman Worldwide Ltd,
<http://www.tagman-press.com>

Born in the English Midlands in 1946, Ray Brown became a trance medium at the age of fifteen, but with a difference: he would allow his body to be occupied by a remarkable "spiritual surgeon". It wasn't until 1990 that he became a full-time healer, and not until 1999 that the spirit he had been channelling for all those years revealed himself as Saul/St Paul of Tarsus, he of "a vision on the road to Damascus" fame. The title of Ray and his wife Gillian's book is a reference to how Paul regards himself: "a mere grain of sand in a vast desert".

Over the years, Ray Brown has healed thousands of people with the intervention of Paul the surgeon and a number of other healing-oriented beings working from "the other side" on a subtle level but with powerful, immediate effects on the physical level. The healing work of Brazil's "John of God" comes to mind, but his prime spiritual surgeon is St Ignatius Loyola! Ray and Gillian have been involved with spiritual healing centres for many years and have been operating their own for the last decade in between taking their mission to the world. Their story is told by freelance writer Paul Dickson, who had his own healing by Paul of Tarsus through Ray when he came to write an article, and is published by Anthony Grey (Tagman Press), who since 1997 has

benefited from Paul's spiritual surgical skills. Other testimonials attest to the strength of this unusual healing partnership.

Ray and Gillian are now ministers of the Corinthian Church and Healing Association, and in their book they reveal Paul's teachings for a new, non-Christian spirituality. There's even an interview with Paul!

THE PREVENTION OF ALL CANCERS by Hulda Regehr Clark, PhD

New Century Press, USA, 2004
ISBN 1-890035-34-3 (623pp hc)
Availability: **USA**—New Century Press,
[website http://www.newcenturypress.com](http://www.newcenturypress.com);
Australia—Inner Glow Health Products,
tel (07) 5449 0600

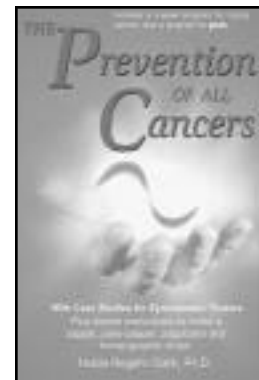
Independent biophysicist and medical scientist Dr Hulda Clark first popularised her research into the link between parasites, toxic chemicals (especially propyl alcohol) and cancer in 1993 with the release of *The Cure For All Cancers* (see 2/22). A couple of books later, and having endured persecution by the authorities, she is still adamant that cancers can be cured, not just treated.

Dr Clark's new book, *The Prevention and Cure of All Cancers*, progresses her groundbreaking work with specific advice on how to kill malignancy-causing parasites, and her regimes involve making dietary changes, taking parasite-cleansing herbs, zapping the immune system back on track with electricity, and eliminating toxins from the external and internal environment. I was shocked (as she was) to find that the single most important epidemiological factor that destroys immunity is a common industrial and household product: liquid chlorine, or bleach. Using a "Syncrometer", Dr Clark has determined that industrial-grade bleach that is

used in water treatment plants and even in the home contains a cocktail of five types of poisons: PCBs, benzene, asbestos, heavy metals and azo dyes. She notes that every cancer patient she has seen in the last five years has tested positive for the "laundry bleach fingerprint" in their body. She has also found that patients who started drinking and bathing in water free of these toxins would improve their health.

Dr Clark discusses primary tumour formation and the dietary triggers for each type of oncovirus in various parts of the body, as well as the foods we should avoid if we want to prevent or eliminate cancer. Different parasites are attracted to different foods, e.g., human liver fluke loves raw or cooked oats, the human intestinal fluke is attracted to raw onion and members of the lily family, the roundworm goes for potatoes and the lung fluke zeroes in on lemon.

There's far more detail than I can go into in this review, so I would encourage practitioners, patients and anyone concerned about cancer to study Dr Clark's argument and take note of her powerful protocols.



REVIEWS



THE ELITE DON'T DARE LET US TELL THE PEOPLE

by Robert Gaylon Ross, Sr
RIE, USA, 2004

ISBN 0-9649888-7-9 (382pp tpb)

Availability: RIE, tel 1800 410 5571

(toll-free in North America), website

<http://www.4rie.com>

The author of *Who's Who of the Elite* (see 4/01) and *Elite Serial Killers of Lincoln, JFK, RFK & MLK* (8/04) has produced a companion book which ties up many disparate threads that he's touched on before. R. Gaylon Ross, Sr, certainly has a bugbear with the "Elite", and his thesis will fuel the fires of conspiracy researchers as much as it will infuriate detractors—some of whom will no doubt reel from his chapter headers, which are excerpts from the infamous, arguably "faked" and often discredited Protocols of the Elders of Zion.

Starting off with a brief history of secret societies of the past and present (from the Illuminati to the Bilderbergs), Ross asks who really is in charge and then answers his rhetorical question with an analysis of the global financial system with reference to fractional reserve banking and money laundering. And it's not a good look: the Elite is doing well, as it always has done at the expense of the rest of us, and the New World Order is on target with its grand plan for control of the masses.

According to the timeline as Ross sees it, the plan is for all the regional unions to be melded into a Global Union between 2015 and 2020. To strike it home, Ross outlines a few of the Elite's crimes in wars old and new and lists the key control organisations and projects that he sees as furthering anti-democratic agendas. Should you care?

What, if anything, can you do?

R. Gaylon Ross has a few answers to "turn back the tide of evil", even the massive US debt—if it's not too late, that is.

RAW MEATY BONES:

Promote Health

by Tom Lonsdale

Rivetco Pty Ltd, NSW, Australia, 2001

ISBN 0-646-39624-2 (389pp tpb)

Availability: **Australia**—Rivetco Pty Ltd,

PO Box 6096, Windsor Delivery Centre,

NSW 2756, tel +61 (0)2 4574 0537, web-

site <http://www.rawmeatybones.com>

We tend not to review books that make their way to us a couple of years after publication, but Duncan, our editor, has made an exception here because he's now the owner of a young dog, a Mastiff/Great Dane cross called Lily. He's been giving her organic, raw meaty bones to chew on and eat and absolutely no processed dog food or even cooked food for that matter, and she's thriving. It's an unexpected joy for me to watch her gnawing away at those bones, knowing she's also keeping her teeth and gums clean and getting essential minerals, vitamins and enzymes. The secrets to obtaining optimal, bounding health for your pet can be found in veterinarian Tom Lonsdale's book, *Raw Meaty Bones*.

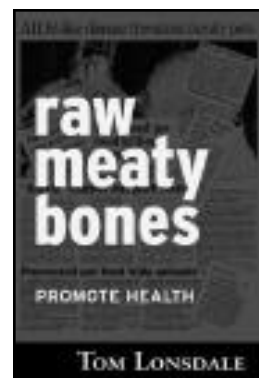
A graduate of the Royal Veterinary College in London in 1972, Tom has a vet practice in Windsor, west of Sydney. It was not until the mid-1980s that he started to become aware of the problems caused when domestic dogs and cats eat a diet of processed pet food, and he began to question what he'd been taught at vet school. He noticed the positive health benefits for pets

when they're fed the sort of food that carnivores are supposed to eat—and that mostly comprises raw meaty bones, carcasses and some organ meats—so he began to do more research, leading to his writing this book.

The story of his battle with the Australian Veterinary Association has commonalities with the experiences of other whistleblowers; in his case, since the early 1990s he's been incurring the wrath of the veterinary establishment, pet food manufacturers and vets working for them.

In his book, six years in the making, Tom explains the unnecessary diseases, including dental and carcinogenic, that domestic pets can get when fed only commercial pet food. He goes into the benefits of raw versus cooked food and gives advice on the right sort of diet for your pet, including how much of what should be eaten and when.

There's much more in this book on misdirected science and vested interests plus observations on wild animals' eating habits. Forget the so-called convenience factor of processed pet food and do the right thing by your pet—who'll soon be as happy as Lily!



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REVIEWS

DIVINING EARTH SPIRIT

by Alanna Moore

Python Press, Australia, 2004 (2nd edition, revised and updated)

ISBN 0-6462-1700-3 (225pp tpb)

Availability: Python Press, PO Box 929, Castlemaine Vic 3450, website <http://www.geomantica.com>

Geomancer Alanna Moore has 20 years of experience in dowsing and working with Earth energies and has travelled to many sacred sites in her native Australia as well as in New Zealand and the British Isles. We reviewed her video, *Dowsers Down Under*, in NEXUS 9/04 and her book, *Stone Age Farming*, in 8/04. This book, *Divining Earth Spirit*, was first published in 1994 but Alanna has considerably revised and updated it for this second edition.

She starts out with an overview of Gaian geomancy, discussing worldwide Earth Spirit traditions and systems of knowledge as well as modern understandings of the Earth's energy grids. Drawing the reader further into the Earth mysteries, she explains the intricacies of ley lines and vortex energies, landscape alignments and stone circles, labyrinths and the enigmatic crop circles. All the while she reports on the dowsing experiences that she and others have had at various sites exhibiting these phenomena, and adds additional information on places she's visited since the first edition was published. Moore has a section devoted to Australasian geomancy and provides fascinating snippets of information and wisdom gained from Aboriginal and Maori elders and from dowsing sacred sites.

Just as acupuncture energy meridians can flow smoothly or be blocked, so too can natural Earth energies, and Alanna explains in

her section on geobiology and electro-biology how geological faults, underground water and man-made radiation can affect the flow and create geopathic stress in the environment and electrostress in people. She gives useful tips on diverting and neutralising bad radiations—techniques which, for example, have been used in transforming dangerous "black spots" on highways.

There's even more to this subject when the spiritual dimension is taken into account, and Alanna provides a window on the world of devas or nature spirits and how to dowse them and work in harmony with them. She also introduces us to a number of gifted geomancers she's worked with and reviews some relevant books published recently on all these subjects. Finally, she covers her own and other geomancers' insights into working with Earth energies, including chanting within depleted sacred sites to help recharge them. Informative and insightful.

PROJECT BETA: The Story of Paul Bennewitz, National Security, and the Creation of a Modern UFO Myth

by Greg Bishop

Paraview/Pocket Books, USA, 2005

ISBN 0-7434-7092-3 (278pp pb)

Availability: Simon & Schuster, <http://www.simonsays.com>

One of the names that has been part of ufological lore since the late 1970s is Paul Bennewitz, an electrical physicist who happened to live on the outskirts of Albuquerque, New Mexico, not far from the Manzano subterranean nuclear weapons repository within Kirtland Air Force Base and the nearby Sandia Labs. Hovering lights, UFO and experimental military craft sightings, alien abductions, cattle mutila-

tions, underground bases and strange broadcasts were all part of his experience, so much so that he compiled a dossier and alerted politicians and the media to what he perceived as an imminent threat to Earth from an alien invasion. This is the story of how a modern myth was made, told by Greg Bishop who is editor of the alternative journal *The Excluded Middle* and the anthology *Wake Up Down There!* (see 8/04).

Bennewitz was an annoyance to the US Air Force Office of Special Investigations, the CIA, the National Security Agency and the Defense Intelligence Agency, but also a salvation to these agencies, argues Bishop, because he could be manipulated as a disinformation agent to spread all manner of tales—which, for better or worse, have since become part of the ufological record. His growing paranoia—not all of his own making, considering his harrowing circumstances and the intrigue going on around him—led to his downfall, but it also defined an era. In *Project Beta*, Bishop keeps us alert to the questions we can't let slip.



REVIEWS



THE LOST COLONY OF THE TEMPLARS: Verrazano's Secret Mission to America

by Steven Sora

Destiny Books, USA, 2004

ISBN 1-59477-019-0 (273pp tpb)

Availability: Inner Traditions,

<http://www.innertraditions.com>;

<http://www.adventuresunlimitedpress.com>;

<http://www.templartreasure.com>

Steven Sora has already uncovered some of the hidden secrets of history in his earlier books, *The Lost Treasure of the Knights Templar* (see 6/04) and *Secret Societies of America's Elite* (10/05). His new book, *The Lost Colony of the Templars*, is another mine of material with a sprinkling of speculation on his part. It follows the Knights Templar and their escape from persecution in France in 1307 to Scotland, where they received the protection of Henry Sinclair, who later sailed with a contingent of them to the New World in 1398. Evidence of their arrival can be found in Nova Scotia, Massachusetts, Vermont and Rhode Island. But what happened to them?



Well over a century later, in 1524, the Italian explorer Giovanni da Verrazano led a voyage on behalf of the French king Francis I, the pretext being to find a shorter route to China but the more likely purpose being to see if the Templar colonies still existed. Verrazano did find a Templar-style tower, a baptistery, near the harbour at Newport, Rhode Island, but apparently, according to reports, there was no evidence of any colonists still alive. However, his backers revived the dream of "Arcadia" and created a secret society, the Company of the Holy Sacrament, that would lay the foundations for Montreal in the hope of realising the Templars' mission to create a sacred place where one could aspire to higher knowledge without fear of Church or State.

Further revelations about the Vikings, Templars, Sinclairs, old European families, secret societies and long-time mysteries make Sora's book an absorbing read.

THE MAGDALENE LEGACY

by Laurence Gardner

Thorsons Element, HarperCollins Publishers, UK, 2005

ISBN 0-00-720084-6 (397pp hc),
0-00-720397-7 (tpb)

Availability: Bookshops;

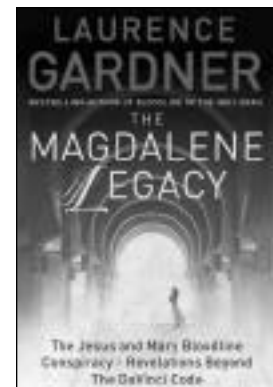
<http://www.thorsonselement.com>

In his brilliant new work, *The Magdalene Legacy*, Laurence Gardner expands on the Jesus and Mary Magdalene bloodline conspiracy that he covered in his first book, *Bloodline of the Holy Grail* (reviewed in 4/01). Referring to New Testament books (including the suppressed ones), historical texts, secret Vatican archives, monastic writings, Templar records, Renaissance art and other sources, he pieces together the picture that Mary Magdalene was far from the so-called "whore" that Roman Church dogma declared her to be, but a priestess of high status and lineage and also the wife of Jesus. She was an integral part of the fledgling Nazarene Christian movement. Their children and descendants, known as the *Desposyni*, were such an inconvenience to Emperor Constantine and his new Roman Church that they were expunged from official records, if not executed, and references to Jesus and Mary Magdalene marrying and having children were suppressed.

Gardner explains that the true Grail, Mary Magdalene (also associated with Sophia, the Greek goddess of wisdom), has been protected and revered for close to two millennia. The signs are there to be seen, especially in Provence, France, her place of exile from AD 44 after fleeing Roman persecution in Judaea. She was venerated by the Knights Templar, who protected the heritage of the *Desposyni*, and her sacred memory is kept alive in many paintings by the great masters including Leonardo da Vinci.

And while Dan Brown's novel *The Da Vinci Code* has triggered debate about the Mary Magdalene conspiracy, Gardner says it contains some misconceptions and he comments on and corrects these in his book.

These revelations have huge implications.



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extraterrestrial
civilisation*

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REVIEWS

ABSURDISTAN: A bumpy ride through some of the world's scariest, weirdest places

by Eric Campbell

HarperCollinsPublishers, Aust, 2004

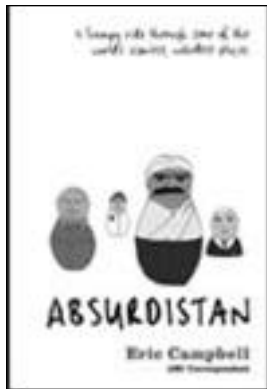
ISBN 1-59477-019-0 (273pp tpb)

Availability: HarperCollins,

<http://www.harpercollins.com.au>

Eric Campbell's first posting as a foreign correspondent for Australia's ABC television was in 1995, to Moscow, and his last posting, where his book closes in 2003, saw him back where he'd started. In the meantime, he'd been to "some of the world's scariest, weirdest places", as the subtitle to *Absurdistan* announces.

His book is a series of diarised vignettes of his experiences in Russia, Chechnya, Armenia, Afghanistan, the Balkans, China, Tibet, the Hindu Kush, Pakistan and Kurdistan. It's his take on news highlights from some of the world's hot-spots, mixed with a record of his personal interactions and poignant reflections.



It was in Iraqi Kurdistan in March 2003, at the onset of the US invasion of Iraq, that Eric's cameraman Paul Moran was killed in a roadside terrorist bombing. Eric was lucky to escape with a few injuries. It was a life-changing experience for him, especially as he had not that long before become a father. He sets the scene in the prologue with this horrific incident and fills in more detail towards the end of the book.

An award-winning journalist at home and abroad, Eric brings a refreshing wit, irony, and sense of the bizarre to his insightful reportage. He is also a master of the wry understatement, as you'll see by opening his aptly titled book at any page.

I first ran into Eric Campbell 25 years ago when we were in a fringe theatre group war-play together; how strange that years later he should be reporting from war zones! His book is a warts-and-all rollercoaster ride through some significant, strange and disturbing moments in recent history, and I heartily recommend the journey.

THE SYDNEY CONNECTION: Nugan Hand, Murray Riley & the Murder of Donald Mackay

by John Jiggins

Network to Investigate the Mackay

Murder, Hill End, Qld, 2004

ISBN 0-9578684-1-3 (133pp tpb)

Price: A\$20.00 + \$5 p&h (+ \$10 o/seas)

Availability: **Australia**—HEMP, PO Box 951, Paddington, Qld 4064

The conspiracy to murder anti-corruption activist Donald Mackay in July 1977 went far beyond any involvement by certain cannabis-growing farmers of Italian descent in the town of Griffith, New South Wales.

According to independent journalist John Jiggins, the murder was ordered by none other than Griffith-born lawyer Frank Nugan, one of the principals behind the notorious money-laundering, drug-and arms-financing Nugan Hand Bank (and who allegedly committed suicide in 1980).

His hypothesis is that Mackay was murdered because he was getting too close to the truth and Nugan couldn't risk exposing his role through his family Nugan Group fruit-packing company in paying the farmers and wholesaling the marijuana crops that were primarily destined for export to the USA. Jiggins believes that the two busted pot plantations around Griffith would have provided a far larger quantity than the entire Australian market demand, and this is where the so-called Sydney Connection came in. The first wave was when Texan Bernie Houghton, with close links to high-level US intelligence and military contacts including in the CIA and US Naval Task Force as well as to the Mafia and Asian drug lords, set up an empire to cater for US soldiers coming to Sydney on R&R leave.

Various serving and former police officers as well as politicians were also implicated, as they were with the next incarnation of the connection after corrupt ex-detective Murray Riley teamed up with Frank Nugan.

Jiggins maintains that with America's withdrawal f

rom Vietnam, the role of this Sydney Connection stepped up in facilitating the transportation of illegal drugs from the Golden Triangle to the USA via Sydney.

He's aghast that three royal commissions couldn't even finger this international crime syndicate, but through his self-published book (a follow-up to *Marijuana Australiana*) he argues the case for a proper inquiry to be conducted. As for Mackay's murderer, he suggests the wrong person was implicated: it was not small-time crim Jimmy Bazley but a corrupt cop, Fred Krahe. Jiggins, who acknowledges work of other researchers on the scent, puts more pieces of the puzzle together.

REVIEWS



DVDs/VIDEOS

Reviewed by Duncan Roads

THE ILLUMINATI – Volume 1

Produced by Christopher Everard-Jurquet and Anthony J. Hilder

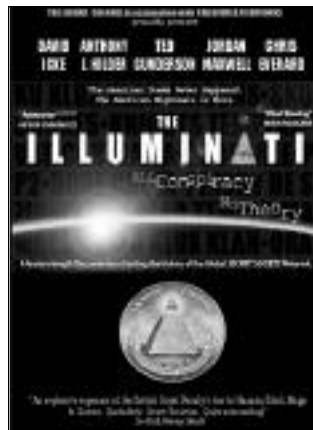
Directed by Christopher Everard-Jurquet
© 2005 The Enigma Channel (116mins)

Availability: **UK**—NEXUS Office;
or via the Enigma website,
<http://www.enigmacyberstore.com/>

This feature-length documentary exposes an alleged global network of secret societies and royal satanists. Are the political systems of the US and Britain controlled by a small group of elite occultists who have sworn allegiance to the All Seeing Eye of Lucifer? For more than two centuries, the aristocracies of Britain and America have been involved in satanic secret societies which have seeded all the major positions of power in politics, the military and the media. The documentary contains interview footage with David Icke, Anthony J. Hilder, Ted Gunderson and Jordan Maxwell.

The Illuminati draws on historical records, footage and photos which take the viewer on a voyage of discovery. It starts with the JFK assassination, covers the two Gulf "Wars", and brings you up to date with details of how members of the Yale Skull & Bones secret society apparently engineered the 2000 and the 2004 US presidential elections.

The subjects covered include: secretly filmed footage of the Bohemian Club's annual rituals; Aleister Crowley; 33rd degree Freemasonry; Albert Pike and the Ku Klux Klan; Tony Blair and the 1591 Studholme Masonic Lodge; footage from inside the Skull & Bones tomb; Winston Churchill and the Order of Druids; Masonic lodges inside British Parliament; The OTO and the Golden Dawn; the British Royal Family; members of Hitler's SS; Satanic possession; devil worship amongst Hollywood stars; and lots more...



THE RISE AND FALL OF A SCIENTIFIC GENIUS: The Forgotten Story of Royal Raymond Rife – Part Two: Rife's Fall

Written, produced and directed by Shawn Montgomery

© 2004 Zero Zero Two Productions, 3 Baldoon Road, Toronto, Ontario, Canada M1B 1V6 (74mins, VHS video only)

Availability: <http://www.zerozerotwo.org/>

Two years ago, I had the pleasure to view *Rife's Rise*, the first part of this documentary series (see 10/03). It was so good, I wanted everyone to see it. I feel the same way about the second part, *Rife's Fall*. But don't fear: if you have come in late, there is an excellent summary of who Rife was and what he did.

Again, this is an excellent documentary and it features genuine audio recordings from over 40 years ago of Royal Raymond Rife himself, explaining research and technical details.

This documentary covers the story of Rife's downfall following the success he achieved in the 1930s in terms of his super-microscopes and Beam Ray machines, sponsors and colleagues, clinical and published research. It was when others sought to profit from Rife that his troubles began.

Prior to his demise, there had been a growing movement towards pleomorphism as a more complete "germ theory"; it can be described as the action of one life-form changing into another life-form. According to this line of thought, the medium—i.e., the blood, not the germ—is seen as the agent responsible for disease.

Pleomorphism, the Rife Beam Ray and the Rife Universal Microscope all stood to revolutionise medicine with drug-free cures for all infectious diseases—which was the last thing the growing pharmaceutical companies of the time wanted to compete against.

If you are at all interested in Rife's research, and the tactics employed to ensure it would be suppressed, then this is yet another "must have" video.



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REVIEWS

MUSIC

Reviewed by Richard Giles

MUSIC FROM THE CHOCOLATE LANDS

by various artists

Putumayo, USA, 2004 (43mins)

Distributors: **Aust**—MRA Entertainment, tel (07) 3849 6020; **UK**—Pinnacle Imports, tel 01689 870622; **USA**—Putumayo, tel 1888 7888 8629, website <http://www.putumayo.com>

Following their wonderful hit, *Music from the Coffee Lands* (see NEXUS 9/03), Putumayo moves on to offering musical selections from the world's main chocolate-producing nations. This CD features Dobet Gnahoré (Ivory Coast), Toto Bona Lokua (Congo), Susana Baca (Peru), Marcantonio (Brazil), Teresa Bright (Hawaii), Beethova Obas (Haiti), Susheela Raman (India), Chocolate Armenteros (Cuba), Ozomatli (Mexico/USA) and more. Very laid-back, relaxing and chocolate-indulging music.

CHARTRES: The Path of the Soul

by Catherine Braslavsky Ensemble

All Seasons Chalice, USA, 2003

(66mins)

Distributor: **USA**—New Leaf, tel 800

326 2665 (toll free); website

<http://www.TheStarHouse.org>

This album was created during five nights amidst the space of Chartres Cathedral in France. Chartres has an 11-ring labyrinth which was built in the 12th century by the Knights Templar. The labyrinth pattern relates to finding the centre of life and thus completeness. Catherine Braslavsky's Paris-based group specialises in music from the sacred texts, and recorded the performance in this powerful, sacred space. The CD contains mediaeval chants and pilgrim songs of the period and powerfully evokes the feel of Chartres as well as its Hebrew, Latin and Middle Eastern roots. The voice is finely celebrated on this, a collector's album.

SPIRIT OF LOVE

by Maya & Sage

Spirit Singer, USA, 2004 (64mins)

Distributor: **USA**—Spirit Singer

Productions, tel (831) 335 3477,

<http://www.MayaSage.com>

NEXUS has covered a number of the new performers of traditional chant music from several cultures. Maya and Sage have released their first album of thousand-year-old Sanskrit mantras, creating their own style by adding popular world-beat sounds with a different flow, thus making these chants accessible to today's audiences. They

use Celtic harp, didgeridoo, native American flute and keyboards with percussion. This is joyful music with sounds you can relate to for awakening the hardened heart of the West. A life-affirming album.

RED & GREEN

by Ali Farka Toure

World Circuit, UK, 2004 (2CDs/89mins)

Distributors: **Aust**—MRA, tel (07) 3849 6020; **UK**—World Circuit, tel (0)1689 870 622, <http://www.worldcircuit.co.uk>

This is a two-CD package of classics from one of the great Malian musicians, Ali Farka Toure. The *Red* and *Green* albums were originally released in 1979 and 1988 and are classic recordings with that slow and powerful, pure and simple African sound that he made famous. They highlight the exceptional early material, showing you what made Ali Farka Toure the master he is today. These albums have been digitally remastered and come with full sleeve notes and lyrics. If you love African roots music, this CD set is definitely worth having.

ENCHANTED EGYPT

by Phil Thornton and Hossam Ramzy

New World Music, UK, 2005 (62mins)

Distributors: **Aust**—New World Music,

tel (02) 9565 4522; **UK**—NWM, tel

01986 781682; **Europe**—MCC, tel +49

4102 898202; **USA**—NWM, tel (303)

415 1040, website

<http://www.newworldmusic.com>

These two first-class musicians, Phil Thornton and Hossam Ramzy, have collaborated twice before to produce albums of Egyptian music. *Enchanted Egypt*, their third work together, includes performances by the group Gypsies of the Nile and various acclaimed Egyptian session musicians. Many of the songs, such as "Saidi" and "Zaar", are based on traditional rhythms, making them great dance pieces. If you love Egyptian belly-dance music, this will be a favourite of yours into the future.



The Persecution and Resistance of Loïc Le Ribault

Continued from page 24

which the publicly concerned scientist finds himself, like Ibsen's character in *An Enemy of the People*, beyond the pale of the orthodox community, branded as a fraud and a charlatan and hounded by the furies of profit and power.

However we read the tale, we might recognise it as a once apocryphal story which is quickly becoming an everyday reality.

The scientist, medical scientist or doctor, forced to work beyond the orthodoxy and subjected to powerful manipulation, ridicule, sabotage and/or criminalisation, is becoming an increasingly common figure in contemporary drama as well as in real life.

Although the ethnic or national details of these histories of scientific dissent, whether their subject be BSE, vitamin B6, OS5 (the new name for G5), cold fusion, homoeopathy or everlasting light-bulbs, differ slightly, they are all stories of the post-modern era.

Le Ribault sees the patient's "right to choose" as being the salient right in the dispute between himself and the French State.

"One point of great weight," he says, "seems to have been forgotten in this whole affair. It is not the medical authorities who should be deciding the fate of sick people. It is for the sick themselves and only the sick to make such decisions."

Le Ribault now feels he has done all he is personally able to do with OS5.

"I have agents in many countries and about 100 doctors and practitioners now using OS5. I receive calls from new doctors every day; there is a lot of interest in France, Belgium, Ireland, Switzerland and Portugal... I have the task of improving the molecule; it is doctors that should be treating people. The production of OS5 is in France, it is legal, it is non-toxic and it is to high standards."

Le Ribault is still angry and perturbed that the French government did not take the discovery from him and Norbert Duffaut, then take over its production and introduce it to the world as an accepted international medicine.

"It is not the government who are in control of the country," he says, "but the multinational corporations and the financial people; my struggle is evidence of that."

Continued next issue ...

Editor's Note:

OS5 can be ordered from the following address in Ireland, where Loïc Le Ribault has set up a laboratory to produce organic silica:

Loïc Le Ribault, c/- Ross Post Office, Castlebar, County Mayo, The Republic of Ireland.

About the Author:

Martin J. Walker is a researcher and writer as well as an activist. He has written a number of books about critical social issues including *Dirty Medicine* (1993; reviewed in NEXUS 2/10) and *Skewed: Psychiatric Hegemony and the Manufacture of Mental Illness* (2003; reviewed in 11/06). The full text of his article on Dr Loïc Le Ribault can be found at http://www.communicationagents.com/emma_holister/2004/11/24/loic_le_ribaults_resistance.htm. It was originally published as a booklet, "Loïc Le Ribault's Resistance: The creation of a treatment for arthritis and the persecution of its author, France's foremost forensic scientist" (Slingshot Publications, London, 1998, ISBN 0-9519646-1-5).

Endnotes

1. Loïc Le Ribault has a Bachelor's degree in Arts from the Sorbonne (1970), degrees in Oceanography, Ecology and Soil Science from Paris (1971), a Master's degree in Geomorphology from Paris (1971) and three doctorates, in Sedimentology, Science and Naturopathic Medicine. He has received many honours and awards and is the author of five books and over 100 published papers plus many articles. Between 1982 and 1991, Le Ribault gave evidence in over a thousand cases, helping to convict 800 defendants mainly of murder and other violent crimes. He introduced not only the electron scanning microscope to French criminal forensic work, but also the high technology mobile laboratory constructed in the back of a van.
2. Le Ribault received his doctorate in geology and, as a result of his early work with electron microscopy, he got to know silica so well that he could determine the geological history of a grain of sand. In his first book, *The History of a Grain of Sand*, he told this very story. When he was first approached by the FBI to test three blinded sand samples, he was able to tell them the exact location in the world from which they had been collected, that one sample had been gathered from the bonnet of a car and that another had been in the vicinity of an explosion in Beirut.
3. Carlisle, Edith M., "Silicon as an essential element", Environmental and Nutritional Science, School of Public Health, University of California, Los Angeles; "Newer Candidates for Essential Trace Elements", *Federation Proceedings* 1974 Jun; vol. 33, no. 6.
4. Aubert, J.P., Magolon, G., "Silastic gel and elastomer in the cicatrisation of wounds in the rabbit", *J. Chir.* (Paris) 1993 Dec; 130(12):533-8.
5. Mishchuk, I.I., Nagaichuk, V.I., Gomon, N.L., Berezovskaia, Z.B., Ossovskaja, A.B., "Treatment of burn wounds and wounds healing with secondary tightening using dressings with Aerosil", *Klin. Khir.* 1994; (4):21-2.
6. See, for example, the case of methyl sulphonyl methane (MSM), which has a remarkable similarity to the case of OS5. MSM is an organic sulphur found in meat, fish and fresh vegetables; it was originally used in synthetic form as a nutrient for stiff joints, but is now sold as the food supplement Supersulf. Dr Robert Hershier, who synthesised the compound, has always refused to deal with the pharmaceutical companies because he knows that the substance would be withdrawn and subjected to lengthy trials, which would in turn increase the price of MSM. However, Dr Hershier has managed to get his therapy passed by the US Food and Drug Administration as a food supplement.
7. Graille, Jean-Michel, *Dossier Priore: une nouvelle affaire Pasteur?*, Editions Denoel, Paris, 1984. During the Second World War, Antoine Priore, an officer in the Italian Navy, discovered by chance that certain forms of radiation were able to cure cancer. Following the war, Priore went to France and built a machine to generate radiation and with which he began to get good results on cancer patients. His work was watched, supported and verified with great interest and excitement by the French political establishment. But when an "independent" scientific report was made of his work by cancer specialists, its conclusions were falsified. Priore died in 1983.

Continued from page 32

Pearsall became open to the possibility of cellular memory in transplant recipients partly because of his own bone marrow transplant in 1987, and also because of his Hawaiian heritage that has always valued the heart as being a "thinking, feeling, communicating, and spiritual organ".¹⁰

Schwartz and Russek became open to the possibility of cellular memory partly through Schwartz's discovery of the systemic memory logic in the early 1980s when he was a professor of psychology and psychiatry at Yale University,⁵⁻⁷ and partly through the evolution of dynamical energy systems theory in the mid-1990s as applied to the heart by Russek and Schwartz.^{12,14}

However, systemic memory is only one possible cellular memory mechanism. Other mechanisms (e.g., microtubule memory, which may also involve the systemic memory process) should be considered.¹⁵

If future research documents evidence for cellular memory in transplant patients, the theoretical, clinical and ethical implications are vast.¹⁶

The present findings are reported in the hope that they will stimulate future

research to examine the hypothesis seriously.

Authors' Acknowledgements

We wish to thank the families of the donors, the recipients and the families of the recipients who bravely shared their stories and graciously agreed to have them reported.

The 10 heart transplant cases reported here come from a total sample of 74 transplant recipients (23 were heart transplants), all of whom showed various degrees of changes that paralleled the personalities of their donors. We thank the anonymous reviewers of this manuscript for their constructive feedback. We dedicate this paper to the memories of donors and to the memories of Frank Pearsall, Howard Schwartz and Henry I. Russek, MD—our fathers.

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• **Paul Pearsall**, PhD, is a Clinical Professor at the Department of Nursing, University of Hawaii. He is the author of over 200 professional articles and 15 international best-selling books including *The Heart's Code* (Broadway Books, 1998).

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• **Linda G. Russek**, PhD, is an Assistant Clinical Professor of Medicine at the University of Arizona and Director of The Heart Science Laboratory of The Heart Science Foundation in Tucson, Arizona. She has co-authored more than 40 papers as well as the book, *The Living Energy Universe* (with Dr Gary Schwartz; see above).

Continued from page 76

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Endnotes

1. Lunde DT. Psychiatric complications of heart transplants. *Am J Psychiatry* 1967; 124:1190-1195.
2. Kuhn WF et al. Psychopathology in heart transplant candidates. *J Heart Transplants* 1988; 7:223-226.
3. Mai FM. Graft and donor denial in

heart transplant recipients. *Am J Psychiatry* 1986; 143:1159-1161.

4. Miller JG. *Living Systems*. New York, NY: McGraw-Hill, 1978.

5. Schwartz GE, Russek LG. Dynamical energy systems and modern physics:

Fostering the science and spirit of complementary and alternative medicine. *Alter Therapies Health Med* 1997; 3(3):46-56.

6. Schwartz GE, Russek LG. Do all dynamical systems have memory?

Implications of the systemic memory hypothesis for science and society. In KH Pribram (ed.).

Brain and Values: Is a Biological Science of Values Possible?

Hillsdale, NJ: Lawrence Erlbaum Associates, 1998.

7. Schwartz GER, Russek LGS. The origin of holism and memory in nature: The systemic memory hypothesis. *Frontier Perspectives* 1998; 7(2):23-30.

8. Schwartz GER, Russek LGS. The plausibility of homeopathy: The systemic memory mechanism. *Integrative Med* 1998; 1(2):53-60.

9. Sylvia C, with Novak W. *A Change of Heart*. New York, NY: Little, Brown, 1997.

10. Pearsall P. *The Heart's Code*. New York, NY: Broadway Books, 1998.

11. Song LZYX, Schwartz GER, Russek LGS. Heart-focused attention and heart-brain synchronization: Energetic and physiological mechanisms. *Alter Therapies Health Med* 1998; 4(5):44-63.

12. Russek LG, Schwartz GE. Energy cardiology: A dynamical energy systems approach for integrating conventional and alternative medicine. *Advances. J Mind-Body Health* 1996; 12(4):4-24.

13. Tiller WA. Science and Human Transformation: *Subtle Energies, Intentionality and Consciousness*. Walnut Creek, CA: Pavior, 1997.

14. Russek LR, Schwartz GE. Interpersonal heart-brain registration and the perception of parental love: A 42-year follow-up of the Harvard Mastery of Stress study. *Subtle Energies* 1994; 5(3):195-208.

15. Hameroff SR, Penrose R. Orchestrated reduction of quantum coherence in brain microtubules: A model for consciousness. In SR Hameroff, AW Kaszniak, AC Scott (eds). *Toward a Science of Consciousness*. Cambridge, MA: The MIT Press, 1996.

16. Schwartz GER, Russek, LGS. *The Living Energy Universe*. Charlottesville, VA: Hampton Roads Publishing, 1999.